SUPREME COURT OF THE UNITED STATES.

No. 318.

WARREN HALE, ALLEN GOODMAN, LORENZO HALE, AND JOHN W. GOODMAN, APPELLANTS,

VS.

CHARLES N. STIMPSON ET AL.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

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3 UNITED STATES OF AMERICA, *Massachusetts district, ss:*

At a circuit court of the United States for the first circuit, begun and holden at Boston within and for the district of Massachusetts, on Monday, the sixteenth of October, in the year of our Lord one thousand eight hundred and sixty-five, before the honorable Nathan Clifford, associate justice, and the honorable John Lowell, district judge, in equity.

WARREN HALE *et al.*, complainants,
vs.
CHARLES N. STIMPSON *et al.*, defendants.

The bill of complaint in this cause was filed in the clerk's
4 office on the twenty-second day of May, A. D. 1863, and was entered at the may term of this court, A. D. 1863, and is in the words and figures following, viz :

To the honorable the justices of the circuit court of the United
5 States for the first circuit within and for the district of Massachusetts, sitting in equity:

Warren Hale, Allen Goodman, Lorenzo Hale, and John W. Goodman, all of North Dana, in said district of Massachusetts, bring this their bill of complaint against Charles N. Stimpson, Warren Stimpson, and Horace C. Stimpson, all of Westfield, in said district.

And thereupon your orators complain and say that before the twenty-second day of July, 1845, your orators, Warren Hale and Allen Goodman, being the original and first inventors of a certain new and useful improvement in machinery for shaping irregular surfaces in wood, which was never known or used before their invention thereof, and which was not at the time in public use or on sale with their consent and allowance, made application according to law for letters patent of the United States to be granted to them therefor; upon which application due proceedings being had in all respects, said letters patent were on the said twenty-second day of July, 1845, and bearing date of that day, granted, issued, and delivered to your orators, signed by the Secretary of State and countersigned by the Commissioner of Patents, and under the seal of the Patent Office, by which said
6 letters patent there were granted to your orators, Warren Hale and Allen Goodman, their heirs, administrators, or assigns for the term of fourteen years from the date therof, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used the said improvement, a description whereof was given in the words of said patentees in the schedule thereto annexed, and making part thereof; all which in and by a certified copy of said original letters patent, to be produced and shown to your honors, will more fully appear.

And your orators further show unto your honors that on or about the twenty-second day of September, 1848, your orator, Allen Goodman, by written conveyance of that date, duly recorded in the Patent Office, assigned his interest in said patent to one Jonathan E. Stone, who, on or about the fifth of October, 1849, by written conveyance of that date, duly recorded in the Patent Office, assigned the same to

your orator, Warren Hale, as by reference to said assignments, or certified copies thereof, to be produced in court as your honors may direct, will fully appear.

And your orators further show unto your honors that after said last-named assignment, and on or about the eleventh of November, 1850, your orator, Warren Hale, commenced an action at law for the recovery of damages for infringing said patent, against one Alanson E. Brooks, in the United States circuit court for the southern district of New York, and the same being continued from term to term, and coming on for trial at the term, 1853, upon the plea of the general issue and special matters of defence alleged against the novelty of said invention and the validity of said letters patent, resulted in a verdict for the plaintiff therein, your orator as aforesaid, for one thousand dollars, the amount of which verdict, with the costs, was at the same time paid by the defendant therein.

And your orators further show unto your honors that afterwards, and on or about the third of April, 1855, all the right, title, and interest in said patent having theretofore come to be vested by mesne assignments in the following named parties, Silas F. Lindsay, William Stimpson, Allen Goodman, Nelson Bosworth, George T. Johnson, Charles N. Stimpson, and Warren Stimpson, the defendants herein, the said parties instituted a suit in equity in the U. S. circuit court for the southern district of New York, against the said Alanson E. Brooks, for a renewed infringement of said patent, and the said Brooks duly appeared to said suit and filed his answer denying the originality of the patented invention and that he infringed the patent, and replication was filed and proofs were duly taken, and the cause coming on for hearing on the said pleadings and proofs was duly heard, and after hearing, the defendant therein consented to a perpetual injunction (the complainants waiving an account,) and a decree of per-
7 petual injunction affirming the validity of said patent, and restraining the defendant therein perpetually from infringing the same, was duly issued and serving upon him accordingly.

And your orators further show unto your honors that they are informed and verily believe that the record and papers in said suit have been accidentally destroyed or lost in removing the place of said court for the southern district of New York from one court-house to another several years ago, so that it is out of your orators' power to furnish exemplified copies of said proceedings, but they pray to be permitted to prove the facts here alleged by satisfactory secondary evidence, to be seasonably produced if their said allegation shall be denied.

And your orators further show unto your honors that afterwards the said letters patent, being about to expire, were, upon due application by your orators, Warren Hale and Allen Goodman, the patentees aforesaid, and after strict and thorough inquiry by the proper officers of the Patent Office as to the novelty of the said improvements, *were* extended by the Commissioner of Patents to your orators, Warren Hale and Allen Goodman, for the further term of seven years, as by a certified copy of said original letters patent, showing said extension indorsed thereon, and to be produced and shown to

the court will appear, whereby the said letters patent were made to have the same force and effect in law as if originally granted for the term of twenty-one years.

And your orators further show unto your honors that afterwards and before the 19th day of February, 1863, the said letters patent having, by mesne assignments which have been duly recorded in the Patent Office, come to be owned by your orators, and being found to be inoperative to secure to your orators the full benefit of their exclusive right to the invention aforesaid, as made by the said patentees therein assignors, were by your orators surrendered according to law and cancelled, and new letters patent were issued for the same invention to your orators, assignees as aforesaid, upon an amended specification, which reissued patent bears date the 10th day of February, 1863, is signed by the Secretary of the Interior and countersigned and sealed with the seal of the Patent Office by the Commissioner of Patents, as in and by said reissue patent, or a certified copy thereof to be here in court produced and shown to your honors, will more fully appear, by which reissued patent there were granted and secured to your orators, assignees as aforesaid, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or improvement, and machines embracing the same, for the term of twenty-one years from the 22d day of July, 1845, the date of the said original letters patent.

8 And your orators further show unto your honors that they and those who before them held said exclusive right as hereinbefore alleged, have always, since the grant of said original letters patent, had said invention in public use, and have always asserted and maintained their exclusive right aforesaid, and have never acquiesced in any infringement thereof, and that said exclusive right is of great value to your orators.

And your orators further show unto your honors that the defendants, Chas. N. Stimpson and Warren Stimpson, with George T. Johnson and J. F. Peckham, being then part owners of the original term of said letters patent, did on or about the 18th of May, 1859, assign and sell their said interest, and all their interest, in the manufacture of pianoforte and melodeon legs and stool pillars, (which manufacture they had previously carried on by the use of machines made under said letters patent,) together with their machinery, stock, and good will to your orator, Warren Hale, for the sum in all of about twenty-five thousand dollars, which were paid by him, and did execute with him an agreement of said date of 18th of May, 1859, of which a true copy is hereto annexed, marked A, and made part hereof.

And your orators further show unto your honors that afterwards, and on or about the 7th day of March, 1860, the said patent having been meanwhile extended, as aforesaid, the firm of Warren Hale & Company, of North Dana, aforesaid, consisting of your orators, Warren Hale, George Hale, and Allen Goodman, and the firm of Stimpson, Oaks & Company, of Westfield, aforesaid, of which the defendants, C. N. Stimpson and Warren Stimpson were members, executed a mutual agreement in writing, bearing date said 7th day of March.

1860, of which agreement a true copy is hereto annexed and made part hereof, marked B. And your orator, Warren Hale, and the defendants, Charles N. Stimpson and Warren Stimpson, did on or about the 8th day of March, 1860, execute a mutual agreement in writing, dated of that day, a true copy of which is hereto annexed and made part hereof, marked C, and the parties of the said agreement of 7th March, 1860, acted according thereto during the term of time covered thereby, excepting that the said Stimpson, Oaks & Company failed to account and pay as therein agreed.

And your orators submit that at the expiration of said term of two years from 1st April, 1860, all right of the defendants herein, or either of them, to use any machine containing the invention covered by said letters patent terminated. And, moreover, that in equity and good conscience the defendants ought not now to be heard to deny that said letters patent are valid, or that such machines as they joined in suing said Brooks for using, or such as they procured license by said agreement of 7th March, 1860, to use themselves, are infringements thereof.

9 And your orators well hoped that upon the expiration of said license the said defendants and others, members of the firm of Stimpson, Oaks & Company, would cease to use said machines, as in duty bound, and would respect the rights of your orators in the premises.

But now so it is that the defendants herein, regardless of their said duty, and in violation of your orators' rights as aforesaid, and of said reissue letters patent, and well knowing the premises, have been, ever since the said reissue as well as previous thereto, using at Westfield, aforesaid, the same machine which they had previously, as aforesaid, obtained license to use for two years only, and which embraces in its construction and mode of operation the invention patented as aforesaid, and now exclusively owned by your orators, which use by defendants is without license from your orators, and utterly without right, and produces a constant, serious, and irreparable injury to your orators, not only as it deprives them of their just gains and profits from the use of said patented invention, but because, as your orators aver and charge, the said defendants by such illegal use compete directly with them in their legitimate and regular business, and by underselling them in the market compel them to put down their prices and altogether destroy the advantage which your orators, as patentees as aforesaid, are entitled by law to enjoy.

And your orators further show unto your honors, that the machine which these defendants are so using against your orators' remonstrance and in violation and defiance of their said right does not differ, save in immaterial matters of form and arrangement, from that which the said Brooks was in equity sued for and perpetually enjoined from using as aforesaid, or from that for using which damages were recovered against him at law as aforesaid, and is a plain infringement of your orators' said letters patent not only as reissued, but as originally granted.

All which actings and doings of the defendants are contrary to

equity and good conscience, and tend to the manifest wrong, injury, and oppression of your orators in the premises.

In consideration whereof, and forasmuch as your orators are entirely remediless in the premises, according to the strict rules of the common law, and can only have relief in a court of equity, where matters of this nature are properly cognizable and relievable.

To the end, therefore, that the said defendants may, upon their several and respective corporal oaths, full, true, direct and perfect answer make to all and singular the matters hereinbefore stated and charged as fully and particularly as if the same were hereinafter repeated and they thereunto directly interrogated, and that not only as to the best of their respective knowledge and remembrance, but also as to the best of their several and respective information, hearsay and belief; and more especially that they may answer and set forth whether they have not used since said reissue, and are now using, the machine which they previously used by license, as herein charged, and whether such machine is not constructed substantially in accordance with said letters patent original and reissue, and how differing therefrom, if at all; and whether it is not substantially like those for using which suit was brought by these defendants with others against A. E. Brooks aforesaid, and how differing therefrom, and also what profits they have earned by the use of said machine since said reissue.

And that the said defendants may come to a just and fair account and be made to pay to your orators all the gains and profits which they have so unlawfully made by the use of their said infringing machine, or any similar thereto, and that they and each of them, their attorneys, clerks, servants, agents, and workmen may be perpetually enjoined and restrained by the decree of this court from directly or indirectly making, using, or selling, or causing to be made, used, or sold, any machine containing or embodying the said improvements granted by said reissue letters patent to your orators, and from infringing upon or violating said letters patent in any way, and that such infringing machine now in use by the defendants may be destroyed or delivered up to your orators, and that the defendants may be decreed to pay the costs of this suit, and that your orators may have such other relief as the equity of the case may require and to your honors may seem meet.

May it please your honors to grant to your orators a writ of subpœna ad respondendum, issuing out of and under the seal of this honorable court, directed to the said defendants, commanding them and each of them to appear and make answer to this bill of complaint, and to perform and abide by such order and decree herein as to this court may seem meet; and may it please your honors also to grant to your orators your writ of injunction according to the prayer of this bill, and also a provisional or preliminary injunction issuing out of and under the seal of this honorable court, enjoining and restraining the defendants, their attorneys, clerks, servants, agents and workmen, to the

same purport, tenor, and effect as hereinbefore prayed for in regard to said perpetual injunction.

And your orators will every pray.

WARREN HALE,
ALLEN GOODMAN,
LORENZO HALE,
JOHN W. GOODMAN,
By WARREN HALE.

11 UNITED STATES OF AMERICA, *District of Massachusetts, ss:*

On this 22d day of May, 1863, before me came the said Warren Hale, and made oath that he has heard the foregoing bill by him subscribed, read, and understands its contents, and that the same are true of his knowledge, except to matters which are therein stated on information and belief, and as to these matters he believes it to be true.

Before me. H. W. FULLER, *Clerk.*

A.

Articles of agreement made, entered, and concluded this 18th day of May, A. D. 1859, between George T. Johnson, Charles N. Stimpson, Warren Stimpson, J. F. Peckham, of Dana, in the county of Worcester, and State of Massachusetts, of the first part, and Warren Hale, of Philadelpha, State of Pennsylvania, of the second part, in manner following, to wit:

Whereas we, the said George T. Johnson, Charles N. Stimpson, Warren Stimpson, and J. Flint Peckham, have sold and conveyed to said Warren Hale all our interest in the manufacture of pianoforte and melodeon legs and stool pillars, etc., we therefore agree and stipulate that we will not enter into or manufacture said articles, or in any way, by competition or otherwise, injure the business of said Hale in the manufacture and sale of said articles; and the said Warren Hale on his part agrees with the said parties of the first part that he will assume and relieve the said parties of the first part from all obligations on their part in regard to the hiring of help, and that he will employ the same help at the same prices to the end of the time of their present contracts; and for the true performance of all and singular the covenants and agreements aforesaid each of the said parties binds himself, his heirs, executors, and administrators and assigns, in the penal sum of three thousand dollars, firmly by these presents.

In witness whereof, we have hereunto set our hands and seals this eighteenth day of May, 1859.

GEORGE T. JOHNSON. [L. S.]
CHARLES T. STIMPSON. [L. S.]
WARREN STIMPSON. [L. S.]
J. F. PECKHAM. [L. S.]
WARREN HALE. [L. S.]

Sealed and delivered in presence of—
DANIEL STONE.

12 B.

Know all men by these presents that it is hereby mutually agreed between Warren Hale & Co., of North Dana, in the county of Worcester, and Commonwealth of Massachusetts, manufacturers of piano legs, billiard table legs, &c., for themselves and their representatives and assigns, of the one part, and Stimpson, Oaks & Co., of Westfield, in the county of Hampden and Commonwealth of Massachusetts, manufacturers of similar articles, for themselves and their representatives and assigns, of the other part, in consideration of the promises by each party therein made, as follows, to wit:

The said Warren Hale & Co. having the control of a certain patent for an improvement in the manufacture of piano legs, &c., known as Hale and Goodman's patent, and renewed July 22d, 1859, hereby authorize said Stimpson, Oaks & Co., their representatives and assigns, to use said improvement under said patent in the manufactory now occupied by them at said Westfield, for the term of two years, commencing April 1st, 1860, and following thereon.

And the said Stimpson, Oaks & Co. having the control of a certain patent for an improvement in the design of piano legs, known as Albert Bosworth's patent, and of a certain other patent for cutting wood in irregular forms, known as Wm. N. Oaks's patent, hereby authorize the said Warren Hale & Co., their representatives and assigns, to use said improvements under said patents in the manufactory now occupied by them at said North Dana for the term of two years, commencing April 1st, 1860, and following thereon.

And it is further mutually agreed between the parties that at the end of each three months, commencing on said first day of April, an account shall be mutually rendered of the articles manufactured and the amount of sales thereof by each of said parties during said three months; and at the end of each year the party which has sold the largest amount shall allow and pay to the other party an amount equal to ten per cent. of the difference between the aggregate of sales by one party and the aggregate of sales by the other, it being understood, however, that a failure to render returns punctually at the end of each three months shall not invalidate the right of either party to recover the said ten per cent. whenever the amount shall in any way be definitely ascertained.

And it is further agreed that each party shall, during said two years, manufacture and sell all the articles for which a market can be found in the usual course of business, fire or providential casualty excepted; and that the relative product of the two parties shall be so arranged by exchange of orders or otherwise that the gross product of the one shall not exceed in value the gross product of the other more than one thousand dollars annually.

13 And it is further understood and agreed that if either of the manufacturing establishments of said parties shall be destroyed or materially injured by fire, water, or any providential casualty, the provisions of this contract shall be suspended until the working power of said establishment shall be restored, either by rebuilding or by

substitution of some other establishment, to be carried on by the same party.

And it is further specially understood and agreed that in the case of death of any partner or partners, or of assignment made by either party, the surviving partner or partners, or the assignee or assignees, shall be entitled to claim under this contract, being subject to the liabilities thereof.

And the parties further agree that if either of said copartnerships should be dissolved before the expiration of the said two years, no individual of said copartnerships shall be at liberty within the said two years to engage directly or indirectly in the manufacture or sale of the articles which are now being manufactured by said partnerships.

It is further agreed between the parties that of all actual expenses incurred by either party in the sale of goods an account shall be severally kept, and at the end of each year an adjustment shall be made on the principle that each party is liable for one-half of the total amount.

It is further agreed that the parties shall each defray one-half of the legal expenses which may be necessarily incurred during said two years in defending either of the aforesaid patents, it being understood that such expenses shall only be incurred on mutual consultation and agreement.

In witness whereof, we, the parties, have hereunto set our hands this 7th day of March, in the year of our Lord 1860.

It is further agreed that once in each year, and prior to the annual settlement, each party shall have an opportunity to inspect and examine the books of the other party, for the purpose of ascertaining the amount of articles manufactured and sold under this agreement.

STIMPSON, OAKS & CO.,
By C. N. STIMPSON.
WM. N. OAKS.
WARREN HALE & CO.,
By WARREN HALE.
ALLEN GOODMAN.

14 C.

Know all men by these presents that it is mutually agreed between Charles N. Stimpson and Warren Stimpson, of Westfield, in the county of Hampden, and Commonwealth of Massachusetts, of the one part, and Warren Hale, of Dana, in the county of Worcester and Commonwealth aforesaid, of the other part, in consideration of the mutual promises hereinafter stated, that the said Charles N. and Warren Stimpson, so far as they are concerned, will, whenever called upon, after April 1st, 1860, discharge said Hale from all obligations to them under the agreement of May 18th, 1859, of which a copy is annexed, and will never sue him thereon, and that the said Hale will never take judgment against the said Stimpson on said agreement, and that

the taking of such judgment against them shall entitle them to demand and recover against him a sum equal to the amount of said judgment.

In witness whereof, we, the parties aforementioned, have hereunto set our hands this 8th day of March, A. D. 1860.

(Signed) WARREN HALE,
C. N. STIMPSON,
WARREN STIMPSON,
By C. N. STIMPSON.

15 On the third day of August, A. D. 1863, the following answer was filed in the clerk's office, viz :

To the honorable the judges of the circuit court of the United States for the district of Massachusetts :

The answer of Charles N. Stimpson, Warren Stimpson, and Horace C. Stimpson, respondents, to the bill of complaint of Warren Hale, Allen Goodman, and John W. Goodman.

The said respondents, reserving to themselves all right of exception as to all the matters contained in said bill, for answer thereto, or to so much thereof as they are advised to be material to be answered unto, say :

That they are informed and believe that letters patent were granted to Warren Hale and Allen Goodman as alleged in the bill ; but they, upon information and belief, deny that the improvements therein claimed were original with either or both the said Warren Hale and Allen Goodman, and deny that said letters patent were either in whole or in part, or in any degree valid, and say that the same were in every respect, in part and in whole, invalid and void.

They, upon information and belief, admit the assignment of said letters patent to Jonathan E. Stone and to Warren Hale, as alleged in the bill ; that said Warren Hale assigned the same to the copartnership of Stimpsons & Doane, consisting of William Stimpson, your respondent, Charles N. Stimpson, and Hammond Doane ; and that, afterwards, all the right, title, and interest in said patent by reissue conveyances came to be vested in Silas F. Lindsay, William Stimpson, Allen Goodman, Nelson Bosworth, George T. Johnson, Charles N. Stimpson, and Warren Stimpson, as alleged in the bill.

Your respondents, upon their own knowledge, say that they have used at Westfield but one machine for cutting or planing irregular forms, or in cutting or planing piano or melodeon legs, which machine was constructed under and in accordance with letters patent of the United States granted to William N. Oaks, of date June 18th, 1858, and which machine they still use at said Westfield.

Your respondents, Charles N. Stimpson, upon his own knowledge, and the others upon information and belief, further answering, say that when said Stimpsons & Doane purchased said letters patent a suit was pending in the name of Warren Hale, one of the complainants, against Alanson E. Brooks, of the city of New York, for an infringement of said letters patent ; which suitsaid Stimpsons & Doane, car-

ried on to final judgment under a power of attorney from said
16 Hale; that the machine, for using which said suit against Brooks was brought, was constructed precisely like the machines under said letters patent, except that a lever was used to raise and depress the cutter in planing instead of a rack and pinion; and that said machine had none of the parts or features of the Oaks machine, which alone we have used at Westfield, in respect to which said Oaks machine differs from the machines constructed under the Hale and Goodman patent.

Your respondents, said Charles M. Stimpson, upon his own knowledge, and the others upon information and belief, say they admit that, subsequently, and some time in the year 1855, when the property in the Hale & Goodman letters patent was in Silas F. Lindsay, William Stimpson, Allen Goodman, Nelson Bosworth, George T. Johnson, Charles N. Stimpson, and Warren Stimpson, as alleged in the bill, said parties commenced a suit in equity against said Brooks, as alleged in the bill, but for using a machine different from that for using which he had been sued by said Hale, and which second machine used by Brooks also had none of the parts, or features, or movements of the Oaks machine used by those respondents at Westfield, in respect to which said Oaks machine differs from the machine constructed under the Hale & Goodman patent.

Your respondents, said Charles N. Stimpson, upon his own knowledge, and the others upon information and belief, further answering, admit that the pleadings and proceedings in said equity suit were as alleged in the bill, but they say that the decision of the court in said equity suit was against the plaintiffs, and an injunction was refused, but a decree for perpetual injunction was entered by consent of both parties, which consent was induced and founded upon a mutual agreement that the plaintiffs should waive all costs and damages, as well as an account from the defendant, and grant to him a license to run his machine, and the defendant should consent to the decree above stated; all which agreements were mutually preferred by the parties as being for their mutual interests.

Your respondents, further answering, upon information and belief, admit that said letters patent were extended to said Hale & Goodman as in the bill alleged; but they say that said extended letters patent were invalid and void, the same as the original letters patent issued, of which they were an extension.

Your respondents, further answering, upon information and belief, admit that said letters patent were surrendered as alleged in the bill, but they deny that the specification therein was defective or insufficient through any error arising from inadvertency, accident, or mistake; and they say the patent was not surrendered for the
17 purpose of correcting any such error; that said reissue was obtained by fraud on the part of those obtaining it, and was, therefore, in every respect invalid, inoperative, and void.

Your respondents, further answering, upon information and belief, say that the parties then owning said letters patent, to wit, said Warren Hale and Allen Goodman, learned shortly before they were

surrendered that one William N. Oaks had invented a machine for planing irregular surfaces in wood, for which he had obtained letters patent of the United States, being the same letters patent above referred to, and under which the only machine used by those respondents at Westfield was constructed, which machine of said Oaks had become a successful rival of the Hale & Goodman machine; and said Hale and Goodman desired to stop and prevent its use, wherefore and whereupon said Hale and Goodman surrendered their said patent, and applied for a new patent under a new specification, which described and claimed many improvements and devices never invented by said Hale & Goodman, or either of them, especially the index-plate, and the combination substantially as found in the machine of said Hale and Goodman, and endeavored by a broad and general claim to cover more than said Hale and Goodman, or either of them, had ever invented, and to prevent said Oaks, and his assignees and licensees, from using and enjoying the improvements and fruits of the invention of said Oaks under his letters patent.

Your respondents, further answering, upon information and belief, say that previously to said Oaks taking out letters patent for his invention above named, he exhibited the same to the complainant, Allen Goodman; and said Goodman then declared to said Oaks that his, said Oaks's invention, was in no way an infringement of or interference with the said Hale & Goodman patent; and that, on the day of , A. D. 1848, said complainant Goodman and one Gibbs, did, upon due proceedings, procure letters patent of the United States, to be issued to him of that date, for a new and improved machine for planing irregular forms or surfaces in wood; which machine had a carriage, rotating cutting cylinder, and a tracing roller, all the same as the Hale & Goodman machine; but the tracing roller of said Goodman's machine was guided and controlled by cams, instead of patterns, to produce the form of work required; and that soon after the trial of the abovenamed equity suit against said Brooks in New York, your respondent, Charles N. Stimpson, by reissue conveyances, became owner of an undivided interest in said patent of Goodman & Gibbs, which patent has long since expired and become public property; all which sayings and doings of said Hale and Goodman were well known to said Warren Hale at the time of the reissue of the said Hale & Goodman patent alleged in the bill.

18 Wherefore your respondents, upon information and belief, say that said Hale & Goodman were, both by the said declarations of said Goodman to said Oaks, and the taking of said patent of the United States by said Goodman & Gibbs, which has now, and at the time of said reissue had, become public property, estopped to take out said reissue patent with the claim therein, and that the so taking it out was, on the part of both said Warren Hale and said Allen Goodman, a fraud upon the Patent Office of the United States and upon the public, and so said reissue patent was invalid and void; and, further, that by becoming the owner of an undivided interest in said Goodman & Gibbs's patent, your respondent, Charles N. Stimpson, and by said patent becoming public property, all persons, includ-

ing those respondents, are licensed and have free liberty to use said Goodman & Gibbs machine and all its parts, including the carriage, index-plate, rotating cutting cylinder, and all its parts.

Your respondents, further answering, upon information and belief, say that if said reissue patent of said Hale & Goodman was not obtained by fraud, they deny that they are, by reason of any suit or suits either at law or in equity, or by any other matter or thing, estopped to deny the originality or validity of the original letters patent, or the extension or reissue thereof alleged in the bill; and they do deny that said original letters patent issued to said Hale & Goodman, and said extension thereof, and said reissue patent, and any and every claim therein and thereby made, were original with said Hale & Goodman, or either of them, and that they were in any part or degree valid; and *and* that said Hale & Goodman were not the original inventors, nor was either of them, of anything covered by or embraced within the claims of either said original or extended patent, or the reissue thereof, and especially that there was any new and useful combination set forth in said claims, or either of them, and that the combination set forth in said claims, or either of them, was new, and especially that the use of the index-plate in the Hale & Goodman machines was in any sense a combination requiring invention to produce; but they say that such an index-plate had been long before similarly and in the same way used upon clapboard machines, fluting machines, slabbing machines, hub machines, gear-cutting machines, and other machines, and that the application of such index-plate in the machine of Hale & Goodman was only a double use.

Your respondents, further answering, upon information and belief, say that one Levi Haywood, of Gardner, in the State of Massachusetts, in the year 1837 or 1838, invented and had constructed, and for some fourteen years thereafter used, in his shop in said Gardner, a machine which embraced all the improvements claimed in said
19 Hale & Goodman patent numbered 4120, and all the improvements claimed in said reissue patent numbered 1400; and that one A. B. Clark, of said Gardner, aided in the construction of said machine, and operated it from time to time for several years; and that some time in the year 1835 one Celar Goodrich, then of Springfield, in the State of Massachusetts, now of Middletown, in the State of Connecticut, at said Springfield invented and constructed, and for a number of years used in the United States armory, a machine which embraced all the improvements claimed in said patent numbered 4120, and all the improvements embraced in said reissue patent numbered 1400; and that in the year 1840 one Cyrus Buckland, now of said Springfield, and one Samuel D. Sizer, now of Hartford, in the State of Connecticut, at said Springfield built a machine the same as that built by said Goodrich, and which embraced all said improvements; that machines the same as those built by said Goodrich and Buckland and Sizer have ever since been used, and that, among other persons, James Stillman, E. S. Allen, and Horace Jerome, all of said Springfield, have worked upon and assisted in operating said machines.

Your respondents, further anwering, said Charles N. Stimpson and

Warren Stimpson upon their personal knowledge, and said Horace C. Stimpson on information and belief, say, that on or about the 18th day of May, 1859, the firm of Johnson, Stimpson & Company, of which firm these respondents, Chas. N. Warren, were members, then owning said letters patent numbered 4120, sold said letters patent and all their interest in the manufacture of pianoforte and melodeon legs, with their real estate, tools, machinery, stock, and good will in said business, and executed the agreement all as set forth in the bill and paper numbered A, thereto annexed; but said sale and agreement were, on the part of said Charles N. and Warren, made and executed unwillingly and much against their inclinations, as they were well situated in a profitable business, with every means and opportunity for prosecuting it with convenience and energy. They were, however, carrying on said business under said letters patent numbered 4120, which were to expire July 22d in that year, and said Warren Hale and Allen Goodman informed them that they, said Hale and Goodman, had taken steps to renew said letters patent, and represented to said Charles N. and Warren that they had taken counsel, and that all the rights of the owners of said letters patent would be gone so soon as the patent expired with the patent, and when the patent was renewed the firm of Johnson, Stimpson & Company could no longer use the machines they were then using in their business, or exercise any rights under the patent without purchasing again; which statements of said Hale & Goodman, said Charles N. and Warren believed to be true, and being in the country, where they could have access to no lawyer versed in patent law, they acted upon such belief, and so sold out to said Warren Hale, which they otherwise would not have done, for the sum of $15,000, which was a much smaller sum than the property so sold was worth or would have been sold for by them had they supposed they could have remained in the quiet enjoyment of said property and business, with the use of said machines under said patent.

Your respondents, Charles N. Stimpson and Warren, of their personal knowledge, and Horace Stimpson, upon information and belief, further answering, say, that said Charles N. and Warren went out of the business which as members of the firm of Johnson, Stimpson & Company, they had been engaged in at Dana in good faith, and never intended to engage in it again, when by Warren Hale, both personally and through others, propositions were made and inducements held forth to said Charles N. and Warren, to again engage in said business; said Charles N. and Warren at first declined, but by urging and new propositions being made to them on the part of said Hale and others, they were induced to attend a meeting in said Dana, at which it was agreed to form a copartnership consisting of Warren Hale, Lorenzo Hale, Allen Goodman, complainants in this suit, the abovenamed William N. Oaks, Joseph Fales, George T. Johnson, and your respondents, Charles N. Stimpson and Warren Stimpson; that said copartnership should purchase the Westfield property, which these respondents now own, including the Oaks machine, which is the only machine ever used by these respondents in Westfield; that

the copartnership should own both the Dana property above mentioned and the Westfield property, Hale putting in the Dana property, including the letters patent numbered 4120, which had been extended at the same price as he paid Johnson, Stimpson & Company for it, and that the concern should carry on business at both places, but under a different name at each place; and said Charles N. Stimpson and Oaks should, with the occasional assistance of said Fales, carry on the business at Westfield, and said Charles N. Stimpson, Oaks and Fales, should go to Westfield and endeavor to purchase the property there.

Your respondents, Charles N. Stimpson, on his personal knowledge, and the others upon information and belief, further answering, say, that the same day of said meeting, being not far from the 20th day of September, 1859, said Charles N. Stimpson, Oaks and Fales started for Westfield to purchase the property there, which was then owned by Messrs. Loomis, Lewis & Company. The result of said negotiations was that purchase of the property was made by an agreement to pay $10,000 for the real estate, and about $7,000 more for the personal property, including the abovenamed Oaks machine, and two-
thirds of the abovenamed patent to Oaks, said Oaks then still
21 owning one-third of said patent. Two hundred dollars were paid in cash to bind the bargain; $1,000 were agreed to be paid within a week, and the balance at stated times. The papers were executed by said firm of Loomis, Lewis & Company and by said Charles N. Stimpson, Oaks & Fales. Said Stimpson was reluctant to put his name to the papers, and for some time refused to do so, but Messrs. Loomis, Lewis & Company would not trade and accept the papers unless he would do so. Said Charles N. Stimpson and Fales returned to Dana, where they reported the purchase, to which no objection was made. Meetings were held of all the proposed parties of the copartnership except Oaks, who remained at Westfield to take an account of the stock purchased, in order to perfect the details of the business and execute papers.

Your respondents, Charles N. Stimpson and Warren Stimpson, of their personal knowledge, and Horace C. Stimpson, on information and belief, further answering, say, that at the meetings above named, to the surprise and against the protestations and earnest opposition of said Charles N. and Warren, it was, contrary to the agreement theretofore made and the terms of that agreement, which induced said Charles N. and Warren to agree to become members of said copartnership, decided to carry on the business at both Dana and Westfield under one name, that of Warren Hale & Company, and to take Mr. S. F. Lindsay, a brother-in-law of said Warren Hale, into the copartnership. Said Charles N. and Warren Stimpson then declined to go on any further in the business of forming the copartnership, saying that the above proceedings were contrary to the agreement upon which their consent to enter into the copartnership was obtained and founded. Said Charles N. Stimpson requested that his name should be taken from the papers at Westfield, and to be released from the obligations in regard thereto; this he repeatedly did to Mr.

Hale and the other parties to said proposed copartnership, offering to make such relinquishment of any claims he might have upon all the Westfield property as they would agree upon. Said Fales desired to be released from the Westfield property and his obligations in relation to it, and insisted that said Charles N. Stimpson should not leave him with it upon his hands. Said Charles N. Stimpson endeavored to make several arrangements in regard to the Westfield property satisfactory to all parties, including said Oaks, who felt that he had a valuable interest in it which should not be sacrificed; but said Hale and Allen Goodman refused to take said Westfield property off the hands of said Charles N. Stimpson, or to release him from his obligations relative to it. Said Charles N. Stimpson finally notified said Lorenzo Hale and Allen Goodman personally, and for all others, that if, within a certain time named, they did not take said Westfield property off from his, said Charles N. Stimpson's hands, he,
22 said Charles N. Stimpson, should take said property into his own hands and run it. Said Charles N. Stimpson heard nothing from any of the parties; he therefore went to Westfield with said Oaks, where they soon made an arrangement to buy out the interest of said Fales in the Westfield property, for which they gave him a piano and stool, and took up the note for $1,000 which had been given to raise the one thousand dollars to pay Loomis, Lewis & Company within one week, as mentioned above, which was then lying at Miller's River Bank, and was signed by Joseph Fales as principal, and by said Charles N. Stimpson and Warren Hale & Company as indorsers, was for $1,000, payable in four months from September 26, 1859, its date, and the name of Warren Stimpson was substituted in place of Fales in the papers given for the purchase and sale of the Westfield property. And thereupon said Charles N. Stimpson, Oaks, and Warren Stimpson, formed a copartnership and entered into the business of manufacturing piano and melodeon legs, under the firm-name of Stimpson, Oaks & Company, said Oaks in April, 1860, selling out to William Stimpson, and said William Stimpson shortly selling out to said Horace C. Stimpson. Said firm of Stimpson, Oaks & Company, and its successors, have used the Oaks machine purchased of Loomis, Lewis & Company, and none other, to plane piano and melodeon legs, and only as such copartners have either of these respondents used said Oaks machine.

Your respondents, further answering, say, upon information and belief, that by reason of said Warren Hale and Allen Goodman and Lorenzo Hale so inducing said Charles N. Stimpson and Oaks to agree to purchase said property, for the purposes abovenamed, and by refusing to release them from said agreement to purchase, and by so compelling said Charles N. Stimpson and Oaks and Warren Stimpson to purchase said Westfield property, including said Oaks patent and machine, said Warren Hale and Allen Goodman and Lorenzo Hale assented to said purchase, and licensed said Charles N. Stimpson, Oaks and Warren Stimpson, and their assigns, and the assigns of each of them, to use said Oaks machine and enjoy all rights conveyed to them under said Oaks patent; and that the plaintiffs are

estopped to prosecute this suit, or any other against these defendants, or any of them, even if the Oaks machine and the use of it by these respondents were otherwise an infringement of Hale & Goodman patent.

Your repondents, said Charles N. Stimpson upon his personal knowledge, and the others upon information and belief, further answering, say, that during the winter succeeding the above transactions at Westfield, negotiations were had between said copartnership at Westfield and the company at Dana, for entering into an arrangement substantially the same as the one talked of
23 between the parties in the fall, save that each firm was to continue to own its own property, and March 7th, 1860, said Oaks and Charles N. Stimpson did meet said Warren Hale and Allen Goodman at Greenfield, where the parties executed the agreement, as alleged in the bill, and the paper marked B thereunto annexed; but there was a further agreement in connexion with the foregoing, and essential thereto, then and there entered into by said parties, but not in writing. By said written agreement it was provided that the two concerns at Dana and Westfield should do the same amount of business, but the Westfield concern had but one machine for planing legs, while the Dana concern had two such machines. Said Warren Hale and Allen Goodman stated to us that they had had talk with one Lyman Wheeler, of Orange, Massachusetts, who had such a machine under a license from the old firm of Johnson, Stimpson & Company, and they thought they could buy out his business water-power, stock and tools for $800, and pay in musical instruments, and said Charles N. Stimpson and Oaks, for the Westfield concern, agreed if that could be done they would give to the Dana concern a piano valued at $300, and a melodeon valued at $100, and take the Wheeler machine as the property of the Westfield concern, to be used in the shop at Westfield, and the Dana company might have the rest of said Wheeler's property; and further, if they had to pay Wheeler any money for the Wheeler property, the Westfield company should pay $100 in cash instead of the melodeon; all which was agreed to on behalf of each of said companies. It was further then and there agreed, in behalf of said companies, but not in writing, that they should sell at uniform prices, and that the Westfield concern should defray one-half of the expenses of the extension of said Hale and Goodman patent of date July 22, 1859, both which matters, and the buying out of said Wheeler, were left open, as neither said prices nor said expenses could then be ascertained; and the license in the written agreement, marked B in the answer, was inserted to authorize the Westfield company to use the other machine they were to have, to enable them to do as much work as the Dana establishment, either by building a new machine under the patent numbered 4120, or taking the Wheeler machine, which said Charles N. Simpson then understood to be licensed only to plane melodeon legs.

Your respondents, upon their own knowledge, further answering, say that during none of the negotiations of the members of the Dana company, either before or after that company was formed, either at

Dana or Greenfield, or anywhere else, did any member of that company, or either or any of the complainants, suggest or intimate to either of these respondents, that the Oaks machine used by these respondents at Westfield was in any way or degree an infringe-
24 ment of the Hale and Goodman patent; and they, upon their best information and belief, deny that said Oaks machine was in any way or degree such an infringement or an infringement of said reissue patent numbered 1400.

Your respondents, further severally answering, upon their own knowledge, say that no one of them ever supposed that any license was needed, save from said Oaks, to authorize the use of said Oaks machine, and that they never, before the bringing of this bill, supposed that the license in said written agreement executed at Greenfield was by any person supposed or intended to convey any license or authority to the Westfield company, or any of its members, to continue the use of said Oaks machine, and never supposed that any such license or authority was needed for that purpose, and never would have accepted a license to use the Oaks machine from any person other than said Oaks.

These respondents, further answering, upon information and belief, say that for more than six years previous to the bringing of this bill said Allen Goodman and said Warren Hale well knew that said Oaks machine was in use at said Westfield by said Oaks and his assignees, and that neither said Goodman nor said Hale ever interfered with or forbade such use, but on the other hand both said Hale and said Goodman tacitly assented to and permitted said use, and consented thereto, and also consented to and permitted all assignments of said Oaks patent by said Oaks and his assignees, especially to these respondents, by all which doings and assents and permissions of said Hale and said Goodman, these respondents say said Hale and Goodman and each of them have licensed said Oaks and his assignees, and especially these respondents, to use said Oaks machine, so far as they have any authority or control over it, all which authority and control these respondents deny.

Your respondents further, of their own knowledge, severally say that they faithfully endeavored to perform all matters agreed upon between them and the complainants, and deny that they have knowingly failed in any such performance, but they say that said complainants have repeatedly failed in performing said agreements, especially in that they never furnished to these respondents the Wheeler machine, though these respondents are informed and believe that said complainants purchased the same of said Wheeler. And these respondents deny that they have undersold the complainants in the market, and aver that the only advantage these respondents have had in the market has been entirely due to the greater rapidity with which the Oaks machine works, and the superior quality of their stock, and the finer style and finish of their work. And your respondents are informed and believe that the complainants have no right to maintain their said bill of complaint.

All which matters and things these respondents are ready to aver, maintain, and prove, as this honorable court shall direct, and they pray that all the material questions of fact arising upon this answer may be tried by a jury, under the direction of this honorable court, and that your respondents may be hence dismissed with reasonable costs and charges in this behalf most wrongfully sustained.

CHARLES N. STIMPSON.
WARREN STIMPSON.
HORACE C. STIMPSON.

Subscribed, and sworn to severally by said Charles N. Stimpson, Warren Stimpson, and Horace C. Stimpson, this first day of August, 1863, before me.

WM. L. SMITH,
Commissioner of U. S. Circuit Court for Dist. of Massachusetts.
SMITH & BATES, *Solicitors, and of Counsel.*

This cause was thence continued to the October term, A. D. 1863, when, on the twenty-eighth day of October, A. D. 1863, the following replication was filed in the clerk's office, viz:

United States circuit court, district of Massachusetts, October term, 1863.

WARREN HALE *et al.*
vs.
CHARLES N. STIMPSON *et al.*

The replication of Warren Hale *et al.*, complainants, to the answer of Chas. N. Stimpson *et al.*, defendants.

These repliants, saving and reserving unto themselves all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto, say, that they will aver and prove their said bill to be true, certain, and sufficient in the law to be answered unto; and that the said answer of the said defendants is uncertain, untrue, and insufficient to be replied unto by these repliants; without this, that any other matter or thing whatever in the said answer contained material or effectual in the law to be replied unto, confessed and avoided, traversed or denied, is true. All which matters and things these repliants are and will be ready to aver and prove, as this honorable court shall direct; and humbly pray, as in and by their said bill they have already prayed.

By their Attorneys,
BROWNE & MAYNADIER.

This cause was thence continued from term to term to the October term, A. D. 1864, when, by consent of parties and leave of court, on the third day of April, A. D. 1865, the following additional answer was filed in the clerk's office, viz:

Circuit court of the United States, Massachusetts district, in equity.

WARREN HALE *et al.*
vs.
CHARLES N. STIMPSON *et al.*

To the honorable the justices of the circuit court of the United States for the first circuit, within and for the district of Massachusetts:

The respondents in the above-entitled case, reserving to themselves all benefits of exception to the manifest errors of the bill of complaint, by leave of this honorable court, makes further answer to said bill of complaint, as follows:

The said respondents, further answering, on information and belief, say that the invention claimed as new in the reissued patent set forth in said bill of complaint, or substantial and material facts thereof, before the invention, knowledge, or use thereof by the said Warren Hale and Allen Goodman, were known and used at Wendell, in the State of Massachusetts, by Lyman Wheeler, now residing in Orange, in said State, and at Greenwich, in said State, by Rufus Powers, now residing in Prescott, in said State.

All which matters and things your respondents are ready to aver, maintain, and prove, as this honorable court shall direct; and they pray that they may be dismissed, with reasonable costs and charges in this behalf most wrongfully sustained.

C. N. STIMPSON.
WARREN STIMPSON.
HORACE C. STIMPSON.

UNITED STATES OF AMERICA, *Massachusetts district:*

Subscribed and sworn to by the above named C. N. Stimpson, Warren Stimpson, and Horace C. Stimpson, before me, this twenty-seventh day of March, A. D. 1865.

WM. L. SMITH,
Commissioner of U. S. Court for District of Massachusetts.

The cause was thence continued to the May term of this court, A. D. 1865, when, by consent of parties, and without further replication, publication was ordered, and the cause set down for hearing and fully heard. The same was thence continued to this present term, when the following decree is entered, namely: This cause came on to be heard at the last term of this court, and was argued by counsel. The same was continued under advisement to this present term, and now, after mature deliberation thereon had, it is ordered, adjudged, and decreed that complainants' said bill of complaint be, and the same is hereby dismissed, with costs for the defendants taxed at . From this decree the complainants in open court claim an appeal as follows:

And now come the complainants, Warren Hale, Allen Goodman, Lorenzo Hale, and John W. Goodman, and feeling themselves aggrieved by the final decree of the court in the above-entitled cause, claim an appeal therefrom to the Supreme Court of the United States

to be holden at Washington on the first Monday of December next, and are ready to give security to prosecute their said appeal.

By J. E. MAYNADIER,
their Solicitor.

Which appeal is allowed by the court, and said complainants give good and sufficient security to prosecute their said appeal with effect, and to pay all damages and costs in case they shall fail to make good their said appeal, which security is approved by the court.

A true record.

Attest: JOHN G. STETSON,
Clerk pro tem.

26 At the hearing of said cause the following evidence was used:

Specification.—Warren Hale and Allen Goodman, of Dana, Mass.—Letters patent No. 4120, *dated July* 22, 1845.

To all persons to whom these presents shall come:

Be it known that we, Warren Hale and Allen Goodman, both of Dana, in the county of Worcester, and State of Massachusetts, have invented new and useful improvements in machinery for reducing blocks of wood to certain desired forms and planing the surfaces of the same smooth at one and the same operation; and that the following description, taken in connexion with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein we have set forth the nature and principles of our said improvements, by which our invention may be distinguished from others of a similar class, together with such parts or combinations as we claim and desire to have secured to us by letters patent.

Our machinery belongs to that general class of inventions which have for their object the reducing of plain blocks of wood to any desired irregular form. But our invention is believed to differ, both in its operation and results, from those which have heretofore been contrived. The machines which are now in use for the turning of lasts, gun-stocks, &c., produce their effects by the revolution of a pattern, which guides, and thereby causes the cutting tool to reduce the rough block to a similar form to the pattern, and the articles formed are irregular in all directions, and are left in a rough state when delivered from the machine. In our machine the model or pattern also governs the shape to be given to the rough block, but does not revolve, and while the article produced by the same, such as piano legs, &c., (which heretofore have been made by hand mostly, if not exclusively,) are irregularly or eccentrically shaped, longitudinally, they are plane in a transverse direction, and cannot be turned by a revolving pattern, and moreover the surfaces, when cut by our apparatus, are perfectly smooth and fitted for the application of veneers, &c.

The main features of our machinery are, first, a rectangular carriage moving horizontally on rails and holding the rough block firmly in the centre, and having also a perfect pattern on each side of the carriage; and, secondly, are revolving planing cylinder, similar to those

in common use, arranged in a vertical sliding frame, the mo-
27 tions of said frame being controlled or guided by the patterns aforenamed, as will be shown in the sequel.

The figures of the accompanying plate of drawings represent our machine. Fig. 1 is a side elevation; Fig. 2 is a longitudinal vertical section; and Fig. 3 is a transverse vertical section. A, A, A, A, &c., in the several figures, represent the frame-work, which may be made of wood or iron, and should be strongly put together. B, B, figs. 1, 2, and 3, is the driving drum, from which bands pass to and around each end of the planing cylinder to give it its requisite revolutions; *a*, *a*, *a*, is the horizontal carriage, which is a rectangular frame, strongly put together, and moving forward and back on suitable rails, *b*, *b*, fixed on the top of the frame-work, A, A, A. Proper provisions are made for holding the rough block of wood, *a*, in the centre of this carriage by means of the common lathe-chuck, *c*, and the screw-holder, *d*. On each side of the carriage, *a*, *a*, *a*, as hereinbefore suggested, a pattern, *e*, *e*, *e*, *e*, is firmly fixed, the tops of which are finished smoothly, and have the irregularities or shape in longitudinal section that it is desired to give that face of the rough block, a^1, on which the cutter is to operate. The horizontal carriage, *a*, *a*, is moved forward and back by means of a rack, *f*, *f*, and pinion *g*, fig. 2, engaging with it. The shaft, *h*, on which the pinion, *g*, is fixed, is revolved by hand-power applied to a crank wheel, *i*, on the same shaft with the cogged pinion, *k*, (shown by dotted red lines in fig. 1,) which pinion *k*, works with the geared wheel *l*, on the end of said shaft *h*. The planing cylinder, *m*, figs. 2 and 3, is constructed in the ordinary way with longitudinal knives, attached to a cylinder or to circular heads, but must be of small diameter, in order to make the abrupt turns necessary in giving shape to such articles as are to be wrought upon by our machinery. The journals of this cylinder have bearings in the top of the vertical sliding frame, *n*, *n*, figs. 2 and 3, said frame being provided with guide-rails, *o*, *o*, which move in grooves in the inside of the frame-work. This frame, *n*, *n*, is hung, as it were, upon the patterns, *e*, *e*, *e*, *e*, of the horizontal carriage, by means of friction rollers, *p*, *p*, attached to the exterior of said frame, and which rest on the top surfaces of said patterns. These rollers should be of the same diameter as the cutting cylinder, in order to cause said cylinder to cut longitudinal irregularities on the block precisely similar to those of the patterns. A greater or less number of these friction rollers may be placed between the journals of the cylinder and the tops of the patterns, (the diameter being kept as above specified,) in order to cut larger or smaller articles of the same shape. The vertical motion of the frame, *n*, *n*, guided by the rollers as aforesaid, is produced by the same means as is the horizontal motion for the carriage, *a*, *a*, *a*, viz: the short rack, p^1, and its pinion *q*,
28 on the shaft *r*, and the geared wheel *s*, cogged pinion *t*, and crank wheel *u*, to which hand-power is applied; the whole arrangement and operation of these several parts being substantially the same as those described for similar parts connected to the horizontal carriage, *a*, *a*, *a*.

The mode of operating our machine will be apparent without any lengthy description. The machine requires the care of only one operative, who moves the horizontal carriage, *a*, *a*, *a*, with one hand applied to the crank wheel *i*, while the other hand being applied to the crank wheel *u*, raises and lowers the vertical sliding frame *n*, *n*, which supports the planing cylinder, the operative being guided in this part of the work by keeping the friction rollers, *p*, *p*, in contact with the top surfaces of the patterns, *e*, *e*, *e*, *e*, attached to the horizontal carriage. After one side of a piano leg, or other similar article, has been cut out and planed, the other three similar faces may be formed in the same manner, by turning the rough block round, first through an arc of ninety degrees, then of one hundred and eighty degrees, and then two hundred and seventy degrees from the first point, fastening it at the end of each quadrant by the spring clutch *v*, which engages with suitable holes in the face of the chuck *c*.

Having thus described our machinery, we shall state our claims, as follows:

What we claim as our invention, and desire to have secured to us by letters patent is, the method, herein above described, of copying or forming the longitudinal irregularities of piano legs, and other similar articles, on rough blocks of wood, by means of a carriage moving horizontally against the revolving cutter, and holding both the pattern and the rough block, the cutting tool being raised and depressed for depths of cut by rollers resting on the patterns, the whole method or modus operandi being substantially as herein above set forth.

In testimony that the foregoing is a true description of our said invention, we have hereto set our signatures this eighteenth day of April, in the year eighteen hundred and forty-five.

WARREN HALE.
ALLEN GOODMAN.

Witnesses: WM. HARTT.
ANDREW SMITH.

29 *Specification.—Warren Hale and Allen Goodman.—Reissue patent No.* 1400, *February* 10*th*, 1863.

The schedule referred to in these letters patent, and making part of the same.

To all whom it may concern:

Be it known that Warren Hale and Allen Goodman, of Dana, in the county of Worcester, and State of Massachusetts, did invent certain new and useful improvements in machinery for reducing blocks of wood to certain desired forms, and planing the surfaces of the same smooth at one and the same operation, and that the following is a full, clear, and exact description of the same; reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a side elevation of the invention;

Figure 2, a longitudinal vertical section of the same; and

Figure 3, a vertical section of the same.

Similar letters of reference indicate corresponding parts in the several figures.

The invention pertains to that class of machinery which has for its object the reducing of plain or rough blocks of wood to any desired irregular form, but differs, it is believed, both in its operation and results from those which have heretofore been contrived. The machines which are now in use for the turning of lasts, gun-stocks, &c., produce their effects by the revolution of a pattern which guides and thereby causes the cutting tool to reduce the rough block to a similar form to the pattern, and the articles formed are irregular in all directions, and are left in a rough state when delivered from the machine. In the within-described machine the model or pattern also governs the shape to be given to the rough block, but does not revolve, and while the articles produced by the same, such as polygonal piano legs, &c., which heretofore have been made by hand mostly, if not exclusively, are irregularly or eccentrically shaped longitudinally, and their external surfaces in a transverse section are planes, and consequently cannot be produced, fashioned, or turned by a revolving cutter under the guidance of a revolving pattern; and, moreover, the surfaces, when cut by the within-described machine, are perfectly smooth and fitted for the application of veneers, &c. The main features of the invention are, first, a rectangular carriage moving horizontally on rails, and holding the rough block firmly in the centre, and having also a perfect pattern on each side of the carriage; and, secondly, a revolving planing-cylinder, similar to those in common use, arranged in a vertical sliding frame, the motions of said frame being controlled or guided by the patterns above named, as will be shown in the sequel.

A represents the frame-work, which may be made of wood or iron, put together in any proper way, so as to properly support the working parts. B is the driving-drum, from which bands pass to and around each end of the planing-cylinder, to give it its requisite revolutions. *a*, *a*, *a* is the horizontal carriage, which is a rectangular frame, strongly put together, and moving forward and back on suitable rails, *b*, *b*, fixed on the top of the frame-work A. Proper provisions are made for holding the rough blocks of wood a^1, in the centre of this carriage, by means of the common lathe-chuck *c*, and the screw-holder *d*. On each side of the carriage *a*, *a*, *a*, as hereinbefore suggested, a pattern, *e*, *e*, *e*, *e*, is firmly fixed, the tops of which are finished smoothly, and have longitudinally the irregularities or shape that it is desired to give the surfaces of the rough block a^1, in their longitudinal profile, and on which surfaces the planing-cylinder operates. The horizontal carriage, *a*, *a*, *a*, is moved forward and back by means of a rack *f*, *f*, and pinion *g* (Figure 2) engaging with it. The shaft *h*, on which the pinion *g* is fixed, is revolved by hand-power, applied to a crank wheel *i*, on the same shaft with the cogged pinion *k*, (shown by dotted red lines in Figure 1,) which pinion *k* works with the geared wheel *l* on the end of said shaft *h*. The planing-cylinder *m* (Figures 2 and 3) is constructed in the ordinary way, with longitudinal knives attached to a cylinder, or to circular heads,

but must be of small diameter in order to make the abrupt turns necessary in giving shape to such articles as are to be wrought upon by the machine. The journals of this cylinder have bearings in the top of the vertical sliding frame *n*, *n*, (Figures 2 and 3,) said frame being provided with guide rails, *o*, *o*, which move in grooves in the inside of the frame-work. This frame *n*, *n*, is hung, as it were, upon the patterns *e*, *e*, *e*, *e*, of the horizontal carriage by means of friction rollers, *p*, *p*, attached to the exterior of said frame, and which rest on the top surface of said patterns. These rollers should be of the same diameter as the cutting or planing-cylinder, in order to cause said cylinder to cut longitudinal irregularities on the block precisely similar to those of the patterns. A greater or less number of these friction rollers may be placed between the journals of
31 the cylinder and the tops of the patterns, (the diameter being kept as above specified,) in order to cut larger or smaller articles of the same shape. The vertical motion of the frame *n*, *n*, guided by the rollers as aforesaid, is produced by the same means as is the horizontal motion for the carriage *a*, *a*, *a*, viz: the short rack p^1, and its pinion *g*, on the shaft *r*, and the geared wheel S, cogged pinion *t*, and crank wheel *u*, to which hand-power is applied, the whole arrangement and operation of these several parts being substantially the same as those described for similar parts connected to the horizontal carriage *a*, *a*, *a*. The mode of operating our machine will be apparent without any lengthy description. The machine requires the care of only one operative, who moves the horizontal carriage *a*, *a*, *a*, with one hand applied to the crank wheel *i*, while the other being applied to the crank-wheel *u*, raises and lowers the vertical sliding frame *n*, *n*, which supports the planing-cylinder, the operation being guided in the part of the work by keeping the friction roller *p*, *p*, in contact with the top surfaces of the patterns *e*, *e*, *e*, *e*, attached to the horizontal carriage. After one side of a piano leg or other similar article has been cut out and planed, the other similar faces may be formed in the same manner by turning the rough block round; first, if a quadrilateral figure is required, through an arc of ninety degrees, then of one hundred and eighty degrees, and then two hundred and seventy degrees from the first point, the rough block being fastened or secured at the end of each quadrant by the spring-clutch *v*, which engages with holes in the face of the chuck *c*. If an octagonal figure is required, the rough block is turned at each movement just half the distance above specified to obtain the quadrilateral one. Any other polygonal figure may be produced by having the chuck *c* provided with a requisite number of holes, so that the spring-clutch *v* may engage successively with a number of them at equal distances apart, and corresponding to the number of sides the block or finished article is required to have.

What is claimed as new, and desired to be secured by letters patent, is the combination of the carriage, the pattern or patterns, the tracing roller or rollers, the rotating, cutting, or planing cylinder, and the means for turning and holding the block of wood to be fashioned as described, or the equivalent of them or either of them; the

said combination being so organized substantially, as described, that by its mode of operation the block of wood to be fashioned can be turned to present in succession each of its faces to the action of the cutter—a planing-cylinder, whose axis is at right angles, or nearly so, with the axis of the block of wood—so as to cut the wood longitudinally, while by a longitudinal movement the block of wood is gradually cut or planed from one end to the other on each face in succession, and by another movement at right angles thereto, or nearly so, the cutting action is caused to follow the irregular lines of the
32 pattern, thereby producing a polygon of any desired number of sides, of any desired configuration longitudinally, and with all its sides of similar form.

WARREN HALE.
ALLEN GOODMAN.
LORENZO HALE.
JOHN W. GOODMAN.

Witnesses: D. L. RICHARDS.
DANIEL STONE.

Caveat filed by Warren Hale and Allen Goodman, August 16th, 184 4

To Hon. Henry L. Ellsworth, Commissioner of Patents:

The petition of Warren Hale and Allen Goodman, both of Dana, in the county of Worcester, and State of Massachusetts, respectfully represents:

That your petitioners have invented a new and useful machine for reducing rough blocks of wood, &c., to any desired irregular form, and forming the surfaces of the same smooth for the application of veneers, &c.; and that they are desirous of further time to prepare their specification, drawings, model, &c., and to make further experiments to mature their invention previous to their applying for letters patent therefor. They, therefore, pray that the subjoined description of their invention may be filed as a caveat in the confidential archives of the Patent Office, and preserved in secrecy; and that due notice may be given them (through Ezra Lincoln, jr., of Boston, their attorney) of any interfering application which may be filed during the space of one year from the date hereof, they having paid twenty dollars into the treasury of the United States, and complied with all the requisitions of the patent acts in such cases provided.

WARREN HALE and ALLEN GOODMAN,
By their attorney, EZRA LINCOLN, JR.

Boston, August 13th, 1844.

33 The description referred to in the foregoing petition is as follows:

Our machinery, as suggested in the above petition, is calculated to reduce plain blocks of wood, &c., to any desired irregular shape. and to form the surfaces of the same perfectly smooth, and completely fitted for the application of veneers, &c. The work is all done by means of patterns, the surfaces of which guide the cutting and planing tools. The mechanical arrangement for accomplishing the above

specified result consists of a carriage arranged to move forward and back on suitable ways. To each side of this carriage a pattern of the article to be formed from the rough wood is attached. The rough block is secured in the centre of the carriage so as to be kept rigidly firm. The knives or cutters are attached to a revolving shaft, the journals of which have proper bearings in a frame, which frame is arranged so as to move vertically up and down in suitable guides. Two small friction wheels are attached to this frame, one on each side of the same, which rest on the surfaces of the patterns, the frame being kept down so that the wheels shall always rest upon the patterns, by any suitable mechanical contrivance. From the above it will be seen that, as the carriage is moved forward with the patterns and rough block connected to it as above described, any irregularity of the pattern will cause the frame in which the cutter is arranged to be pressed up and down correspondingly, and thus give a shape similar to that of the patterns to the rough block. In lieu of raising the cutters, the carriage may be moved up and down by the patterns; but the arrangement, in both cases, will be substantially the same.

The above constitutes a description of the main characteristics of our improvements; the details will be more fully explained when we make application for a patent.

File wrapper.—Letters patent, Warren Hale and Allen Goodman, July 22d, 1845.—No. 4120.

Warren Hale and Allen Goodman, town of Dana, county of Worcester, State of Massachusetts.

Machinery for reducing blocks of wood. &c., to irregular forms and smooth planing surfaces. Rec'd April 29, 1845.

Petition, affidavit, specification. Rec'd April 29, 1845.

Drawings. Rec'd April 29, 1845.

Model. Rec'd May 5, 1845.

Treasurer's certificate, $20; caveat, $10. Rec'd April 29, 1845.

Examined, Fitzgerald, July 17th, 1845.

Issue, H. H. Sylvester, July 18th, 1845.

Patented July 22, 1845. Recorded vol. 26, page 332.

EZRA LINCOLN, JR., *Boston, Agent.*

34 TESTIMONY FOR COMPLAINANTS.

Deposition of Eleazar Goodman.

Int. 1. What is your name, age, residence and occupation?

Ans. My name is Eleazar Goodman; I am fifty-four years of age, and reside in North Dana, in Massachusetts; I am now in the employ of Warren Hale & Co., piano leg manufacturers.

Int. 2. Were you in the employ of Charles N. Stimpson & Co., at Westfield, Massachusetts, piano leg manufacturers, at any time, and when?

Ans. I was there most of the time in their employ for one year, ending April, 1863.

Int. 3. During your employment there, did they use to your knowl-

edge any machine for cutting or planing piano or melodeon legs and similiar articles?

Ans. They did; it was in constant use while I was there.

Int. 4. Please look at the model now exhibited to you, marked on frame "Stimpson, H. L. H., U. S. com'r," and say how far it corresponds, if at all, with the machine used, as you have testified, by Stimpson & Co.

Ans. It resembles the machine they used. I see no difference, except that the connexion between the inner end of the lifting lever and the lifting frame is, in the model, a single wire; in the machine, I believe, the connexion was formed in links. There was also a provision for holding down the outer end of the lifting leaver, and thus keeping the frame up when no cutting was going on. The piece under the cutter represents only one section of the piano leg, showing the line of one of its faces. After each face was cut the leg was turned upon the centre to a distance regulated by an index-plate so as to bring the block just right for cutting the next face. With these exceptions I see no difference between the model and the machine, as they used it.

Int. 5. Who composed the working members of the firm of Charles N. Stimpson & Co., while you were employed there, as you testified?

Ans. Charles N. Stimpson, Warren Stimpson, and Horace Stimpson.

ELEAZAR GOODMAN.

35 *Deposition of Joseph B. Crosby.*

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Joseph B. Crosby; age, thirty-five; residence, Boston, Mass.; occupation, mechanical engineer and solicitor of patents.

Int. 2. Please state what experience you have had in the examination and comparison of mechanisms, upon questions of substantial identity and difference, whether for the purposes of judicial investigation or otherwise.

Ans. For the past ten or eleven years I've been constantly engaged in soliciting patents, and in that business have always been accustomed and called upon to examine inventions, particularly those in mechanism, with regard to their novelty, their utility, and their similarity or dissimilarity as regards others, and have been frequently called upon to testify as an expert in mechanical matters in causes before the United States courts, and the Patent Office in its various departments.

Int. 3. Have you had any experience in the practical working of wood? If so, please state what and how much.

Ans. I have worked in wood, more or less, for about six years, part of the time employing from one to fifty workmen, and am accustomed to use all the tools used in working wood with my own hands, and also to wood-working machinery, such as shears, planing machines, mortising and turning machines, boring machines, and lathes. My personal work was confined mostly to mill work and

pattern work, and I have had charge of ship carpenters and ship construction.

Int. 4. Have you examined the letters patent issued to Warren Hale and Allen Goodman, dated 22d July, 1845, and also the reissue thereof to those gentlemen and Lorenzo Hale and John W. Goodman, and do you understand the mechanism therein described and claimed?

Ans. I have examined both the patent and the reissue, and understand the mechanism therein shown, its construction, and mode of operation.

Int. 5. Look at the model now shown you, marked "Hale & Goodman, Exhibit 1, N. A. Parks, ex'r," and state how it differs, if at all, from the machines described in said reissued letters patent.

Ans. The mechanism of the model is identical with that of the reissued patent, differing in nothing but unimportant details of form.

Int. 6. Look at the model now shown you, marked "Stimp-
36 son, H. L. H., U. S. com.," and state how it differs, if at all, from the mechanism described and shown in said reissued letters patent, giving the reasons for your opinion.

Ans. I have examined the model referred to and understand its construction and mode of operation. In it there is the same substantial organization of mechanism that exists in the reissued patent, and the same substantial method of operation; in both there is a rotating planing cutter, a device for holding the material to be worked, and for turning the same at definite angles and retaining it in definite positions; in both there is a movement of the piece to be worked under the cutter, and the arrangement of the cutter relative to the work is such that the axis of the cutter and the axis on which the work turns are in planes at right angles to each other; in both the cutter is moved towards and from the work by the passage of patterns, which impinge against rollers connected with the cutter, so that the profile formed by the cutting operation is governed by the shape of the pattern; the work in both is guided in such a way as to prevent the axis of the cutter and of the work from getting out of the right angled or square position before alluded to. In the Stimpson model there is a compound carriage which holds the work and the patterns so constructed and arranged that the pattern moves faster than the work; this calls for an elongated pattern to produce any given profile. In the reissue patent the arrangement is such that the pattern and profile are identical; by the elongated pattern used in the Stimpson model, the angles of inclination on the patterns are reduced so that the cutter is easily elevated thereby, but in the reissue there is an arrangement of gearing, by which the operative can assist the inclinations of the patent in raising and lowering the cutter. Elongating the pattern as in Stimpson, or using gearing as in the reissue, are simply two ways of accomplishing the same thing, that is, the vertical movement of the cutter. Each may have its own peculiar advantages.

Int. 7. Please compare the cog gearing found in the model and reissue, name their purposes, and state how they resemble or differ from each other.

Ans. In the Stimpson model there is a system of gearing which causes the work and the pattern to progress under the cutter; in the reissue patent there is a similar system of gearing for accomplishing precisely the same thing. The reissue patent has another system of gearing, separate from that first mentioned, by which the rise and descent of the cutter with relation to the pattern can be controlled by the operator. It is useful in easing the cutter up the steep inclines of the pattern, or what is the same thing, easing the inclines, when steep, from the weight and pressure of the cutter, and also in lowering the cutter down steep inclines. In the Stimpson model there is a lever and link, by which the raising of the cutter with respect to the pattern can be accomplished.

37 Int. 8. You have said that the vertical motion of the cutter, in the Stimpson model is produced by the elongated pattern; please compare the cog gearing by which that pattern is driven with the cog gearing by which is produced the vertical motion of the cutter in the reissue patent, and explain their differences of mode of operation, as far as the vertical motion of the cutter is concerned.

Ans. The cog gearing in Stimpson, by causing the pattern to progress under the cutter, wedges the cutter upward while the weight of the cutter causes the downward movement; in the reissue the system of gearing which moves the cutter up and down, operates entirely independent of the movement of the pattern; the operative, if he chooses, can, with this gearing, always keep the rollers, the guides of the cutter, in contact with the pattern, or entirely clear from it; but if the gearing in the reissue, by which the cutter can be caused to move, is let alone by the operative, gravitation of the cutter and the action of the inclines of the pattern would insure a proper contact between the pattern and the cutter guides. The function of this gearing in the reissue is to ease and accommodate the cutter and guides to difficult or abrupt places in the pattern.

Int. 9. What effect do the differences between the machine described in the reissue patent and the model "Stimpson, H. L. H.," have upon their substantial identity or difference, in construction and mode of operation?

Ans. I consider that they have no effect.

Int. 10. Compare the model now shown you, marked "Simpson, No. 2, H. F. S.," if you understand its construction and mode of operation, with the machine described in the reissue patent, and state the material and substantial points of dissimilarity and resemblance, giving your reasons for the opinions expressed.

(Objected to.)

Ans. The mechanism shown in the reissue and the mechanism of the model have in common as follows: A carriage in which the work is mounted, so that it may be turned on an axis to a given angle or angles, and there secured; a pattern; a rotating cutting cylinder and a guide connected therewith; (assuming, from the explanation of coun-

sel and from the model, that a roller was intended to be placed above the upper end of the cutting cylinder in the plane of the bottom.) The arrangement of the axis, about which the work turns, is at right angles with the axis of the cutter, and the organization of the model is such, that this right angled arrangement cannot be changed except by extraordinary and special effort. The work is caused to progress, with relation to the cutter, by muscular effort, un-
38 aided by gearing or "power." In the reissue and in the model, the profile cut is determined by the contact of the guide with the pattern, this, in each case, determining the distance of the cut from the axis on which the work rotates. There are minor differences, chiefly those of form, but the organization and mode of operation is substantially the same in each. The work in the model is moved towards the cutter; in the reissue, the cutter moves towards the work. The arrangement of the cutting-cylinder is vertical in the model and horizontal in the reissue; but the axes of the the work and the cutting-cylinder have the same right-angled relation to each other in the model and in the reissue, and in neither can that relation be disturbed in the practical operation of the machine.

Int. 11. Suppose the guide-roller just above the cutting-cylinder and in the plane of the pattern to be secured so that it will not revolve, and explain how, if at all, this would affect the organization and mode of operation of the machine.

Ans. It would be an inferior mechanical construction, and would result in increased wear of the pattern, would require some more effort of force to move the work to the action of the cutter, but the organization and substantial operation of the machine would be unchanged.

Int. 12. What further instruction than the description and drawing in the reissue patent convey, would a mechanic, ordinarily skilful in the construction of such mechanism, require to enable him to build and operate the machine described in the reissue patent?

Ans. None whatever.

Cross-examined by Chauncey Smith, esq., counsel for respondents:

Cross-int. 1. In your answer to the seventh interrogatory you refer to the lever and link upon the model marked "Stimpson" as being means by which the cutter can be raised. Do you understand that this lever and link is called into play in the act of planing, or is used in any way to control or guide the motions of the cutter in planing?

Ans. Whether it would be used or not would depend upon the form of the pattern; if there were any upright or steeply inclined places in the pattern, it would be very useful to ease the pattern under the cutter; in the general forms of patterns, where there are no abrupt places, it would not be necessary ao use the lever and link.

Cross-int. 2. In the opinion that you have expressed as to the

substantial identity of the two machines, have you assumed that this lever and link are used for that purpose?

39 Ans. I have not; they might be left out of consideration.

Cross-int. 3. How do you understand that in fact the cutter is eased over the abrupt elevations and depressions in the work to be planed in that machine?

Ans. That would depend on the degree of abruptness. I suppose that generally the elongation of the pattern reduces the angles in the profile of the pattern so that the inclined faces of the pattern do not present such an angle as to prevent the pattern from being drawn under the cutter guide; but no elongation of the pattern will alter a vertical place therein, and if such face or a sharply inclined place should occur, then the operative might ease the cutter on that face by operating directly on the cutter frame, using his hands on the link and lever shown in the model.

Cross-int. 4. Do you understand that the elongated pattern and its movement, separate from the carriage which carries the block to be planed, are designed to secure the same end or accomplish the same result which, in the Hale & Goodman machine, are secured and produced by the rack and pinion connected with the cutter-frame, especially in respect to abrupt elevations and depressions in the face of the work to be planed?

Ans. I do. I consider that the elongated pattern and its differential movement from the work is designed to reduce the angles in the face of the pattern, so as easily to raise the cutter. The object of the gearing in the reissue is to enable the operative to move the pattern easily under the cutter in abrupt places.

Cross-int. 5. Looking at these two devices, not with respect to their common object or purpose, but as special means for accomplishing this common object, do you consider them as substantially the same in construction and mode of operation?

Ans. I should consider them different mechanical devices for accomplishing the same object, and as such should think one might be patented as an alleged improvement over the other.

Cross-int. 6. My inquiry is whether they are substantially the same in constructien and mode of operation. Will you give your opinion upon that point, with your reasons for it?

Ans. Looking at the two devices as different means for accomplishing a common object, I should say that they were substantially different mechanical means, and operate in a different manner, mechanically. The one in the model operates by the action of gravitation and of the inclination of the pattern faces to move the cutter, except in the very abrupt changes before referred to; and so, in fact, does the arrangement in the reissue patent act in the same way. The gearing being there used to raise and lower the cutter only in

40 abrupt places, the cutter being left to the guidance of the pattern, except in such places, so that perhaps this gearing rather operates as the brake and link in the Stimpson model. The elongation of the Stimpson model pattern, by reducing the abrupt places, does not require extraneous aid from the pattern to aid the passage

of the pattern under it so often as the reissue, that is, assuming the work to be produced the same in both cases.

Cross-int. 7. In forming your judgment as to the substantial identity of the two machines, did you assume that, in fact, in the actual operation of the machine described in the reissue, the cutter follows the pattern in any part of its course, without the aid of the operator, through the rack and pinion? and if so, does that fact affect your judgment as to the substantial identity of the two machines?

Ans. I did not consider how or why contact between the pattern and the guide was obtained. The substantial points being in this connexion, that in both cases there is a pattern and there is a guide, and that they are, or can be, kept in contact with each other to determine the profile of the work.

Cross-int. 8. Suppose that in point of fact, in the two machines, when employed in any work which they are designed to do, the reissue machine does require the aid of the operator in the manner mentioned, and the other does not, what would be your judgment as to their substantial identity, especially as respects their mode of operation—assuming further that the reissue machine would not operate practically for doing the work it is designed to do, except in the manner indicated, and that the Stimpson machine does not require the aid of the lever and link in any case?

Ans. That would not alter my opinion of the identity of the organization and mode of operation of the two machines. The one might be a decided improvement in its detail of construction and in the minor points of its operation, but it would still embody the important characteristics of the other.

Cross-int. 9. What do you consider the important characteristics of the reissue machine to be which distinguish it from other machines for planing irregular forms?

Ans. I conceive it to be the arrangement and organization of certain details with respect to each other. The details are a rotating cutting cylinder, a carriage provided with means for mounting a piece of work, so that it may be turned on an axial line at given distances or angles, and locked or secured in any one of them; a pattern connected with the carriage, and a guide connected with the cutting cylinder. The arrangement or organization being such that the carriage carrying the block and pattern must have a longitudinal movement with respect to the cutting cylinder, and the cylinder or
41 carriage may move towards each other all the time, being mechanically guided so that the axis of the cutting cylinder and of the work shall be at right angles with each other.

Cross-int. 10. The reissue patent speaks of two main features of the invention therein described, will you make a comparison of the description there given of these main features and the model marked "Stimpson, H. L. H.," and point out their resemblances and differences as respects these two main features?

Ans. "The rectangular carriage moving horizontally on rails, and holding the rough block firmly in the centre, and having also a perfect pattern on each side of the carriage," is found in the Stimpson

model in a compound form. There are two carriages here, one which moves faster than the other, and carries the pattern, which is perfect, or intended to be so, but elongated, bearing some definite proportion to the profile intended to be produced by the cutter. A secondary carriage moves in the primary carriage in ways therein, and bears the work firmly by its centre, so that it can rotate thereon. The primary carriage moves horizontally on rails, and the secondary carriage, or the other part of the compound carriage, is guided in its movement by the primary. "Secondly, a revolving planing cylinder similar to those in common use, arranged in a vertical sliding frame, the motions of said frame being controlled or guided by the patterns." In the Stimpson model there is the common revolving planing cylinder, not arranged in a vertical sliding frame, but in a vertically vibrating frame. The motions of the frame are controlled by the patterns, though they may be controlled by a link and lever, as seen in the model.

Cross-int. 11. Will you refer to that part of the patent which speaks of the main features of the machine, and also to a subsequent portion which refers to the tracing-rollers, and state in what sense you understand the word "perfect" to be used in the clause first referred to, where it speaks of a "perfect pattern."

Ans. I think "perfect" there is intended to indicate that the pattern shall conform exactly to the profile of the cut wanted.

Cross-int. 12. Used in that sense, do you find in the "Stimpson, H. L. H.," or the Oaks machine, so called, what in the patent is spoken of as the first main feature of the invention, viz., a carriage moving horizontally on rails, and holding the rough block firmly in the centre, and having also a perfect pattern on each side or the carriage?

Ans. No, I do not find a pattern which corresponds in all its measurements and contour to the cut desired. It has a definite relation to the cut desired; its heights or depressions the same, but its curves are elongated.

Cross-int. 13. If such an elongated pattern were placed on
42 the carriage of the Hale & Goodman machine, instead of a perfect pattern of the work to be done, and the machine were then operated in the manner described in the reissue patent, would it produce work of the required outline?

Ans. It would produce work the faces of which would be of the exact outline of the pattern used. The same pattern used in both machines would not produce the same profile.

Cross-int. 14. Will you look at the reissue patent where it speaks of the second main feature of the invention, and also at that portion of it which describes the construction and operation of the frame which carries the cutter, and at that portion which describes the mode of operating the machine, and state in what sense you understand the words "controlled or guided by the patterns," in the passage just referred to,

Ans. The description of the operation indicates that the workman by the gearing should raise and lower the cutter, observing to keep

the guide-rolls in contact with the pattern; but in the construction of the machine there is nothing which renders it absolutely necessary that this should be done, unless the inclinations or angles are abrupt. It is necessary sometimes to do this, and it is clear to me that it would sometimes not be necessary for him to manipulate the gearing. It is a question of degree of incline.

Cross-int. 15. My question did not refer to the operation of the machine, but to the sense in which you understood the words specified to be used in the passage referred to. Will you explain how you understood those terms as used in the patent?

Ans. "Controlling and guiding," as explained in the clause referring to the operation of the machine, means that the position should be governed by the of the operator through the gearing, the patterns indicating to the operator how to manipulate the gearing.

Cross-int. 16. Will you look at the patent now shown you, granted to Wm. N. Oaks, June 8, 1858, and numbered 20,505, and state whether the model marked "Stimpson, H. L. H.," is constructed in accordance with the specification in that patent, and whether any means are indicated or suggested for elevating or depressing the cutter, except the elongated pattern shown in the model?

Ans. It is. There is nothing shown in this patent, except the pattern, for raising the cutter, which falls by its own gravitation, and nothing to keep it from falling but the pattern.

Cross-int. 17. Will you state whether you find in the model "Stimpson, H. L. H.," that the cutter is controlled and guided by the pattern in the same sense in which those terms are used in the reissue patents in speaking of the second main feature of the invention in the passage before referred to?

43 Ans. In "Oaks" the pattern is described as active in controlling the cutter. In the reissue, in the description of the operation, the cutter is controlled by the operator to correspond to the pattern.

Cross-int. 18. In the reissue patent it is said that "the vertical motion of the frame *n*, *n*, guided as aforesaid, is produced by the same means as is the horizontal motion of the carriage *a*, *a*, *a*," &c. Will you state whether the vertical motion of the cutter in the model "Stimpson, H. L. H.," is produced in the same way as in the machine described in the reissue, understanding the term "produced" to be used in the same sense as to both machines, that it is in the reissue patent?

Ans. In the reissue the cutter is described as raised by other means than the pattern. In the model with the pattern thereon no other means are needed to raise the cutter than the pattern.

Cross-int. 19. Have you examined the model of the machine marked "Heywood, E. Merwin, U. S. C.," representing a machine said to have been formerly used in the town of Gardiner, in this State, by Levi Heywood, and made yourself familiar with its construction and mode of operation?

(Objected to as not opened by the direct examination.)

Ans. I have.

Cross-int. 20. Will you state whether, in your judgment, it differs substantially from the machine described in the reissue patent, and if so, in what respect?

Ans. It does differ substantially from the machine shown in the reissue, in that it lacks the devices needed to produce polygonal shapes. The work is not therein arranged to revolve upon an axis, then to turn the work to definite angles, and nothing to hold the work when turned to angles. It is organized to cut one profile or face in any one piece, and cannot economically be used to produce polygonal figures. It is a part only of the machine shown in the reissue, and does not embody its whole combination or organization.

Cross-int. 21. Do you refer now to that part of the machine described in the reissue patent which is called the index or dial?

(Objected to, as before.)

Ans. Yes; and not to that only, but to the means of holding and turning therewith connected as well.

Cross-int. 22. State specifically all the parts to which you refer, referring to their description and designations in the specifications and drawings.

(Objected to, as before.)

Ans. Referring to the drawing in the reissue, there is a piece marked *c*., which serves the purpose of an ordinary lathe-
44 chuck, so mounted in a bearing that it can revolve around the same axial line with the axis of a piece, *d*, also mounted in a suitable bearing, which piece serves the usual purpose of a dead centre of a lathe; that is, it affords the means of clamping leg a^1 to the chuck *c*, so that both a^1 and *c* must rotate together. The chuck *c* is made to serve a double purpose, that of an index, there being holes drilled therein, and a spring catch or finger *v* that engages in the holes and clamps the leg a^1 in any desired position. All of this mechanism, or any equivalent for it is lacking in the model referred to, and its arrangement with its axial line at right angles to the axis of the cutter *m*.

Cross-int. 23. You do not mean to be understood, do you, that in the model referred to, there are no means of holding the work, or that the work is not held in a line at right angles with the cutter, or that the work could not be turned in that machine so as to plane several sides in succession, and produce a figure of four or eight sides?

Ans. Certainly not.

Cross-int. 24. Do you understand that in the reissued patent the means there referred to for holding and turning the work are limited to the precise means there shown?

(Objected to as calling for an opinion on the law of the case.)

Ans. Certainly not. They extend to any means that operate in substantially the same way. That is, to means which afford facility for turning work on its axial line without displacement or variation therefrom, and for so clamping it on that line that the different faces of any desired polygon may be presented and held to the action of the cutter.

Cross-int. 25. Will you give an illustration of what you mean, different from that described in the patent?

Ans. The leg might be bored through the whole length of its centre, and placed on a mandrel capable of rotation on the axial linal line *c d;* it might be connected in various ways with that mandrel; the index might be placed on one or the other end of the mandrel, and it might or might not form part of the piece or shoulder against which the leg is clamped. It would not be, in my opinion, an equivalent to the devices described in the reissue patent to which reference has been made, to clamp a piece on a plane bed as in a planing machine or saw-mill, and then after one face had been cut, to turn the piece over, block it up, measure it, be sure you get it into line again, then dog it, and again measure and inspect it, to see its adjustment is not changed by the clamping operation, and then repeat this process ad infinitum, according to the faces of the polygon to be operated upon. Such a machine would not compete in production with one organized as shown in the reissue.

45 Cross-int. 26. I understand, however, that, in your judgment, a machine containing the devices you have last described might be used to produce this kind of work. Am I correct in this?

Ans. You are. I could make a pianoforte leg by such an arrangement, but, if paid by the piece, should make a sorry living by it.

Cross-int. 27. If I understand you correctly, the distinguishing feature or characteristic of the machine described in the patent, as respects the means for turning and holding the work, is this, that the block of wood shall be held upon the centres, and that there shall be some means similar to that referred to in the patent as a spring-catch, which shall hold it in a fixed position while the operation of planing is performed, and shall then permit it to be released and turned to another position to be again operated upon as before.

Ans. Yes, so far as respects those means.

Cross-int. 28. Will you state whether, in your opinion, the machine referred to as the Haywood machine, differs from the machine described in the reissue patent substantially in other particulars; and if so, how?

Ans. It has no other substantial difference. If the turning and holding device were put into the Heywood machine, I should consider that it was then substantially the machine shown in the reissue.

Cross-int. 29. Would its introduction into that machine change or modify the mode of operation of those parts of the machine which were there before, excepting, of course, the means for holding the work, for which new means would be substituted?

Ans. It would not.

Cross-int. 30. In forming your judgment as to the substantial difference of the machine described in the reissue patent and the Heywood machine, do you assume that the means referred to in the reissue patent for holding and turning the block are new as first used in that machine?

Ans. Certainly not.

Cross-int. 31. Do you assume that these means had been used previously in the same manner and for the same purpose in other machines, and especially in those in which the work is held upon the carriage and moved up to a cutting instrument of any kind?

Ans. If that refers wholly to the turning and holding means, I do.

Cross-int. 32. Is the function performed by those means in holding the block, as distinguised from their use in turning it, substantially different from the method of holding the block shown in the Heywood model?

Ans. There is a substantial difference.

Cross-int. 33. Will you read the description of a machine formerly used at Dana, described in the cross-examination of Lorenzo Hale, and especially the answers to the 21st, 22d, 23d, and 24th
46 cross-interrogatories, and state what substantial difference you find between that machine and the one described in the reissue patent?

Ans. The description of the machine given in the deposition is not sufficiently clear for me to form an opinion about it.

Cross-int. 34. Do you understand his description of the manner of holding and turning the block?

Ans. No, I do not.

Cross-int. 35. Will you make a comparison between the machine described in the reissue patent and the Heywood machine, respecting what are called in the patent the two main features of the invention, and state what substantial differences you find between them other than that already mentioned, viz., the means for turning and holding the block?

Ans. I find no substantial difference, with the exception of the means of turning and holding the block.

Cross-int. 36. Will you point out what you consider to be the substantial difference between the means of holding the block in the Heywood machine and the reissed patent, considered solely with reference to the holding of the block, and independent of the turning?

Ans. In the Heywood machine there are independent means, separate from the holding means, for lining up the work with reference to the cutting cylinder or placing the work with regard to the cutter. In the "Heywood," to place and hold the work properly, there is necessarily a gauge or gauges which co-operate with the holding devices, and the block has to be got out with some kind of a definite surface to be placed against that gauge before you can use it in the clamping apparatus. In the reissue patent the clamping and gauging are effected at the same time and by the same means, and no gauge, other than the parts on which the block revolves and by which it is clamped, is needed.

Cross-int. 37. I repeat the question, limiting it to the mere fact of holding after the work is properly placed, by whatever means.

Ans. In the act of holding they are substantially alike.

Cross-int. 38. The difference between the two then, if I understand you, consists entirely in the means employed for placing the

block, or bringing its faces into the proper position to be operated upon by the cutter?

Ans. No; for in the "Heywood" it differs from the reissue in that you cannot move the block at all without releasing it from the action of the clamping device, and in so doing the work is changed in its position relative to the cutter, longitudinally.

Cross-int. 39. Is not that a difference resulting from the difference in the means for placing the block, or bringing it into its required position?

Ans. It is.

47 Cross-int. 40. Then do I understand you that the difference between the two consists only in the means employed for placing the block, or bringing it into the required position, together with the difference in their mode of operation resulting therefrom, as explained in your answer to the 38th cross-interrogatory?

Ans. The device in the reissue and the device in the "Heywood" both act alike, in that when the work is once placed in either, it is held still by the action of the cutter, and for the mere purpose of holding the work still under the action of the cutter the means employed in both are substantially similar; but inasmuch as the means for holding and clamping are connected with means for placing, independent of means for turning, there exists the difference which I have already described; that is, in the reissue the clamp is not a clamp alone, but is a gauge for placing; in the "Heywood" the gauge is separate from the clamp; and in this last clause I have not considered the means for turning at all.

Cross-int. 41. What do you refer to when you speak of the gauge?

Ans. In the "Heywood" it is the depression in the bed, by which the work is adjusted without care on the part of the operator, except as to its height at each end, the gauge taking charge of the sidewise adjustment of the work. In the reissue it is the centres, or points on which the work is hung, and by which its position is fixed in every direction, both sidewise and vertically.

Cross-int. 42 Will you give your reasons why you regard the difference between the reissue machine and the "Heywood" machine, as to what is called in the patent the first main feature of the invention, viz., the means of holding and turning the work, to constitute a substantial difference in the machines, while the difference as to the second main feature of the invention, between the means described in the patent for raising and depressing the cutter, and those shown in the "Oaks" machine, do not constitute a substantial difference between these two machines?

Ans. The pattern is used to determine the position of the cutter in both machines; and whether it performs the work of raising the cutter in whole or in part, or not at all, and other means are employed to raise the cutter, I regard as of no substantial importance, the chief function of the pattern being to prevent the cutter from making too deep a cut, and not for the purpose of raising the cutter. If the machine is so organized as to give that function to the pattern, it may be well enough, or may be no better than other means; but without

means for turning the block in its centre to desired angular positions, the machine is not organized as contemplated in the reissue, and cannot produce polygonal figures of irregular longitudinal out-
48 line economically. The difference in one feature is comparatively unimportant, while it is vital in the other to the economical working of the machine.

Cross-int. 43. Suppose that, in point of fact, it should turn out upon trial that the difference in the economical working between the "Oaks" machine and the reissue machine was as great or greater in favor of the "Oaks" machine as the difference in favor of the reissue machine was between that machine and the "Heywood" machine—how would that fact affect your judgment as to the substantial differences you have mentioned?

Ans. It is impossible for me to make such a supposition.

Cross-int. 44. I did not ask you to make a supposition, but to state how your judgment would be affected if the fact were as I stated.

Ans. I should say that the "Oaks" patent, in that case, would be a valuable one, very; but that the function of the pattern in regulating the position of the cutter would still he the same. Making the assumption assumed in the question, I should say the machine organized as in the reissue would have no practical value, or, if any, but a very slight one; but as long as the pattern is employed to guide the cutter, or is so employed that the cutter may be guided thereby, there would be no substantial difference in the general organization or method of working, however inferior the reissue might be to the "Oaks" machine.

Cross-int. 45. The point of my inquiry is this: In the latter part of your answer to the 42d cross-interrogatory, you say that the difference in one feature is comparatively unimportant, referring, as I understand you, to the difference between the "Oaks" machine and the reissue machine, in their economical value, whereas the difference is vital in the other as to the economical working of the machine, referring, as I understand you, to the difference between the reissue machine and the "Heywood" machine. If I am right in my understanding of your answer, what I wish to know is this: how your judgment would be affected, if it were proved by the practical working of the machines that the difference in the economical value of the "Oaks" machine over the reissue machine was as great as the difference in the economical value of the reissue machine over the "Heywood" machine.

(Objected to as assuming that this difference in the economical value is the foundation of the witness's opinion as to the substantial difference between these machines.)

Ans. My opinion as to the economical results in working the reissue machine and the "Heywood" machine, comprise not only the economical view, but also the fact of a different method of working, so far as holding and turning is concerned. If it were proved that that the reissue machine was as inferior to the "Oaks" ma-
49 chine in the matter of relation of the pattern to the cutter, as I know the "Heywood" machine to be to the reissue machine

in the matter of turning and holding, I should say that the reissue machine would have the same value relative to the "Oaks" machine, that the "Heywood" machine has, in my opinion, relative to the reissue machine, but that opinion would be limited to the matter of the economical working alone, and would not affect my judgment that the organization of the cutter and pattern were not substantially changed. The differences which plainly exist being those of detail and not affecting the function of the pattern as a guide or limitation to the cutter.

Cross-int. 46. (De bene esse.) Do I understand you correctly in assuming that your opinion as to the substantial identity of the machine represented by the model marked "Stimpson No. 2., H. F. S." with the reissue machine, is based upon the presence in the former machine of the same means for holding and turning the work?

Ans. It is based upon the presence of those means as one element of the entire organization. The presence of those means alone does not make up the identity of the machine with the reissue. In my opinion as to identity, I consider the whole organization.

Cross-int. 47. (De bene esse.) How far do you find the machines substantially alike or unlike as to their other parts, and independently of their connexions with the means for holding and turning the work?

Ans. I consider them alike in that they both have rotating cutting cylinders, a pattern of the profile of the work, a carriage in which the work is held and so moved to the cutting cylinder that the axis of the work shall be mechanically maintained at right angles to the axis of the cutting cylinder, and the guide which interposes between the pattern and the cutting cylinder so as to keep the desired distance between the axis of the work and the cutting cylinder. They are unlike in that the axis of the cutting cylinder is vertical instead of horizontal. One pattern performs the functions of two; direct muscular action keeps the proper relation of the pattern and guide-roll instead of mechanism interposing for that purpose, The work is moved to the cutter instead of the cutter to the work; and the progression of the work past the cutter is effected by direct muscular action, and not by the intervention of mechanism.

Cross-int. 48. (De bene esse.) State whether or not, under the same limitations and conditions as were made in the last interrogatory, the same resemblances and differences are found between the model referred to and the "Heywood" machine.

(Objected to as immaterial.)

Ans. The "Stimpson No. 2" and the "Heywood" are substantially similar in respect to the cutter and pattern. There are the same resemblances and differences as mentioned in my previous answer.

Direct examination resumed by J. E. Maynadier, esq:

Int. 1. Suppose the mechanical device for elevating and depressing the cutter shown in the "Oaks" machine were so great an im-

provement over the device for the same purpose shown in the reissue patent that the legs cut on the former would cost only one-half or one-tenth as much as those cut on the latter, would this affect at all, and if so, how much, your opinion as to the substantial identity in construction and mode of operation of the two machines themselves?

Ans. It would not affect it in the least.

Int. 2. Suppose, by some change in the laws of nature, that piano legs could be cut very cheaply and perfectly upon the "Heywood" machine, as shown in the model, how would this affect, if at all, your opinion as to the substantial difference between that machine and the reissue machine?

Ans. My opinion would not be changed.

Int. 3. Assume that the mechanical device shown in the "Oaks" machine for elevating and depressing the cutters is substantially different in principle and mode of operation from the device for effecting the same purpose shown in the reissue, how would this affect, if at all, your opinion as to the substantial identity of the two machines themselves?

Ans. The identity would still remain.

Int. 4. Please read your answer to the 9th cross-interrogatory, and state whether you find in the models marked "Heywood, E. Merwin, U. S. C.," "Stimpson No. 1," and "Stimpson No. 2," respectively, the arrangement, and organization, and details there mentioned.

Ans. I find all the organization there mentioned in the two "Stimpson" models, and but part of it in the "Heywood" model.

Int. 5. Read the 12th cross-interrogatory and answer, and point out in the "Oaks" machine the "perfect pattern" spoken of in the reissue, or what you regard as an equivalent thereof, and state whether that is not a perfect pattern for all practical purposes.

(Objected to.)

Ans. This pattern is found in the "Oaks" model, on each side of the primary carriage, and differs from the pattern shown in the reissue, by being elongated to correspond with its increase of movement beyond that of the block. Its elevations and depressions
51 are in height and depth equal to the elevations and depressions to be produced in the block, the logitudinal dimensions of the pattern only are changed. It is not the less a "perfect pattern" from the fact of this elongation, which is given thereunto to reduce the inclines so that they may easily, in their passage under the cutter, wedge it up and lower it down. It acts perfectly as a guide to the cutter, preventing it from making too deep cuts, or from leaving too much wood on the block when the tracing roll is kept in contact with the pattern. That it acts in itself as a wedge or incline on which the cutter is elevated or lowered, does not change in any respect its function as a pattern.

Int 6. Please point out in the description or drawings of the reissue patent any obscurity or insufficiency which would prevent an ordinarily skilful mechanic from building, with those drawings and that

description only as a guide, the machine therein described, so as to operate successfully.

Ans. The patent is sufficient to enable an ordinarily skilful person to construct and operate the machine therein described.

J. B. CROSBY.

52 TESTIMONY FOR RESPONDENTS.

Deposition of Rufus Powers.

FRIDAY, *March 18th*, 1864.

Interrogatories proposed by Chauncy Smith, esq., in behalf of the respondents:

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Rufus Powers. My age is fifty-three. I reside in Prescott, Massachusetts. I am a farmer and mechanic—mostly engaged in mechanical business.

Int. 2. Did you know when Messrs. Hale and Goodman obtained their patent upon a machine for planing pianoforte legs, and did you about that time do any work for them upon such a machine? and if so, will you state whether it was before or after they made their application for a patent?

Ans. I knew very nearly. It was in July, I think, in the year 1845; and about that time I worked for them on such a machine. It was before they made their application.

Int. 3. What work did you do, and who employed you.

Ans. I couldn't tell, precisely, all I did. It strikes me it was something on a machine for getting up piano legs. It was some of the iron work. It was done at my shop. Mr. Goodman did some work, and I assisted him some. Mr. Goodman employed me.

Int. 4. Had you before that time built a machine for planing irregular work on different sides? If so, will you state when you built it, and whether it is now in existence or not? and if so, where it has been since that time, and where it now is?

Ans. I had. I should think I got the machine done so that I tried it in 1841. I can't tell the precise time I commenced it and tried some experiments. It is now in existence. It has been in my shop in Greenwich since it was built, and is now there.

Int. 5. Will you produce a model of that machine, and explain its different parts and the way it operated?

53 Ans. The witness produced the model marked Powers No. 2, and said: The lower piece is a table to place the machine on. The cylinder on the table contains the cutter and the pulley over which the connecting band passes. The brass pieces represent the guides over which the pattern passed in order to give the work the desired shape. The pieces marked *a*, *a*, represent the ways on which the carriage slides. The slots in the side of the table are for the purpose of guiding the carriage, the projecting pieces on which enter into the slots and move backwards and forwards therein. The upper piece marked C represents the carriage. The purpose of the two horizontal irons is to hold the block to be planed, and they are

fixed in position, the centre by a screw and the spurred centre by the index, or by the screw alone. The crank at the end of the carriage, with the spur attached and the holes, represents the index. I sometimes used this as indicated in the model, and sometimes used spurs in the wood, which entered a hole in the handle. I also sometimes used pins, which I passed through the hole in the crank into the wooden end of the carriage. The crank piece, when used with a spur, was itself a spring, so far as was necessary to press the spur into the hole. The pieces marked *b* represent the patterns used to give the desired shape to the piece to be worked. The tin piece represents a support for the carriage, which rested on and passed over a pattern placed on the table in front of the cylinder, which I sometimes used instead of placing the patterns on the side as now shown in the model. The purpose of the screw, between the tin and the carriage, was to vary the position of the support, and thus to vary the size of the work, with the same pattern. The carriage was moved back and forwards by hand.

Int. 6. How large was the original machine, what kind of work was it designed to plane, and how much did you use it?

Ans. I believe it was about three feet and two inches long. I am now speaking of the carriage. It would plane a piece about twenty-one inches long. Spokes were the first thing I thought of planing with it. Immediately after that I thought it might work on table legs and bedstead posts. These, I think, were all I had in mind at that time. I should think I used it to plane a hundred or two pieces of various sorts.

Int. 7. Why did you not use it more?

Ans. The carriage was not quite long enough to work the different lengths of spokes.

Int. 8. State how it performed its work, so far as the planing of such blocks as could be put into the machine were concerned.

Ans. It did its work satisfactorily to me. I was well satisfied with the work of it.

54 Int. 9. Did you ever plane four-sided or eight-sided work on it, or any table legs, or things of that kind?

Ans. I have planed both four-sided and eight-sided work. The machine was not long enough to plane table legs.

Int. 10. Will you state whether you afterwards built another machine of a similar kind, and if so, when you built it, and what it was designed for?

Ans. I did build another machine that might be similar to it in some respects, I think in the spring of 1844. It was designed mostly for spokes.

Int. 11. Is that machine now in existence? and if so, where is it?

Ans. It is, at my shop where I work, in Greenwich.

Int. 12. How much was it used for planing spokes? and if it was ever used for planing other kinds of work, state what kinds, and how much it was used on such other kinds.

Ans. I couldn't exactly tell how much it was used for planing spokes, but I should judge I had planed several thousand. There is

no work of any great importance excepting spokes which has been done upon it. I think I did some saw-frames.

Int. 13. When you planed spokes and saw-frames, did you use a pattern to determine the form to be given to the work?

Ans. I did.

Int. 14. Will you look at the model marked "Powers No. 1," and say how nearly that is a correct representation of the machine of which you have last been speaking, especially as to its working parts, and point out any differences which you find?

Ans. The inside frame is quite similar. The pattern is placed in the same position, and the raw material to be worked. The ratchet wheel is not in the same place that I used it, I think. The ratchet wheel was on the centre or arbor that runs through the middle piece marked *e*, instead of being on the end piece. This arbor makes a centre for both the spoke and the pattern on the machine. It holds firmly both the pattern and the piece to be worked, so that they revolve together. In the place of the outer frame shown in the model, there were in the machine fixed supports in which the inner frame or carriage slid, the end opposite to the pattern resting upon ways. The operation of the carriage was the same as represented in the model, sliding backwards and forwards, and being raised at one end by the roller, as shown in the model, the supports serving to keep it in place instead of the outer frame.

Int. 15. Will you explain the difference between this machine and the one marked "Powers No. 2"?

Ans. This is more particularly designed to give different shapes to all sides of the material worked, while the other gave the same shape to all the sides alike. In this machine the pattern and work revolve together; and if the sides of the pattern were alike, or it were used, as it might be, without revolving the pattern, the sides of the work will all be alike.

Int. 16. Did you ever use this machine to plane work, the different sides of which were alike? If so, what kind of work?

Ans. I never did a great deal. I have worked out saw-frames, the middle pieces. Have perhaps experimented with other things, but never did anything else of any account that I recollect of.

Int. 17. When you did use it to plane such kind of work, state how you secure the proper turning of the work, so that the several sides should have the proper relation to each other, or angle.

Ans. When I worked out saw-frames I never planed out the whole of the sides, but planed on the edges. I had a sort of knife or cutter that gave the shape by running it twice over the machine. It was made in the same shape that I wanted the edges of the saw-frame. I planed one side and then turned it over and planed the other side. I turned it over by means of the ratchet wheel, which, with the arbor upon which it was placed, was held in position by means of a screw. I didn't do much work in this way, except by way of experimenting.

Int. 18. When spokes were placed upon this machine, did the work

come out with a number of flat sides, and require to be afterwards rounded by other means?

Ans. It did.

Int. 19. Will you state whether you afterwards built another machine of a similar kind? If so, when it was built; what kind of work it was used for; how much it was so used, and where it now is?

Ans. I built another afterwards. I can't tell when it was built, certainly; it strikes me that it was built in 1849 or 1850; it might have been sooner, but I shouldn't want to say so. It was used for making spokes and piano legs. I should think I planed out some thousands of spokes, but I can't give anything very definite as to amount. I should think I made from thirty to fifty sets of piano legs. The machine is now at my shop, where the others are.

Int. 20. Will you state how it corresponded with the models which you have spoken of, and how it differed from them, or either of them?

Ans. It was considerably like the model marked "Powers No. 1," with the variations as I described them. It was made with several centres, so that I could put in several spokes at a time, and the middle centres or arbors, which held the raw material, were geared together, so that by turning one you could turn them all. The pattern was placed in the same relative position.

56 Int. 21. Will you explain how you used it to plane piano-forte legs?

Ans. I think I used the pattern in the same place as when I made spokes, but it was stationary. The whole was turned by means of a ratchet wheel, and fastened by means of an index. The index was a round iron plate, and there was a catch which caught into it, either in notches in its circumference, or went into holes near its circumference; I think the former. It was placed on the middle arbor.

Int. 22. Did you have any talk with Mr. Hale or Mr. Goodman, about the time when they took out their patent, in relation to taking it out? If so, will you state whether you told them that you had constructed a machine of a similar character, and what conversations or negotiations took place between you on that subject?

Ans. I did, with both of them. The first conversation I had was with Mr. Goodman, when he came over to my shop, I should think in the fall or winter of the year 1844. He came over to get me to help him about a little work. He told me he was going to get up a machine for planing piano legs. He went on and described his plan or principle, and I told him that I had a machine on the same principle, and had had it for between two and three years. Then there was some talk about my having—I thought I ought to have—some share in the patent. The work that he wanted me do was work on the machine they were getting up. Soon after that I saw them both together, or if I didn't see them together, I saw Mr. Hale. I think they were together. This was over at Dana, and we all agreed that we would take out a patent together. I was to have what we called one-half of it, that is, the application of the machine to all work except square work. They were to have the square work. What I

call square work was four-square work. I didn't consider it upon any other plan. At that time all piano legs were got out square or four-sided, so far as I know anything about it. There was nothing said about eight-sided or sixteen-sided work. I was to pay for half of the expense of the patent, and they for the other half. I think there was a time agreed upon to take some measures to have the right secured. I went over to Dana to see them at the time appointed, with the money ready to do my part. When I got there, Mr. Hale had gone to get the right secured, or had got it secured when I got there, and my name was left out. That was what Mr. Goodman told me. There was no reason assigned to me why I was left out, that I recollect of. Mr. Goodman told me at that time that there were some writings made out and put in Jonathan Stone's hands. He told me that the writings were in Mr. Stone's hands, and I think he told me that I could see them by going to him.

57 Int. 23. Will you state whether you did go and see the writings? and if so, whether you now have the writing, or any copy of it; and if not, state what the writings were, or the substance of them.

(Objected to.)

Ans. I went and saw the writings. I have neither the writings nor any copy, and never had them. The amount of the writing was that they were to give me one-half of the patent right.

Int. 24. Were the writings signed by them, or either of them, and did you ever sign them?

Ans. I think they did not sign them, and I did not.

Int. 25. Why did you not sign them, if they were to be signed by you? And if you know any reason why they did not sign them, state what it was.

Ans. I think there were several reasons why I did not sign. I think one was because they had not signed, and because they had not done according to agreement in having me go in and take out a patent with them. I don't know why they didn't sign them.

Int. 26. Did you ever, after that, have any conversation with them, or with either of them, about signing the papers, or about their taking out the patent without your name?

Ans. I don't recollect any particular conversation about the signing of the papers; possibly there might have been something said. Soon after that time I took Mr. Stephen Oaks with me and went over to Dana to see Mr. Hale. I saw him and asked him what he had taken such a course with me for. We had some considerable conversation then. I can't recollect particularly about it. I don't recollect that he gave any reason. He seemed a good deal excited and agitated when we were talking about it.

Int. 27. Where is Mr. Oaks now?

Ans. He is dead.

Int. 28. Did you have any other conversation with them, or with either of them, after that on the subject?

Ans. I did. A short time after that they came over to my shop. As they came over I went over to the mill and called Mr. Thresher

to come to take notice of what was said. Mr. Hale wanted to see the machine. He seemed to do pretty much of the talking. I refused to let them see it, giving as a reason the course they had taken with me.

Int. 29. Did you ever consult any one, or take any steps about taking out a patent yourself upon your machine, (I mean the machine which was built in 1841,) notwithstanding their patent?

Ans. At the time I got the machine up and tried my experiments with it, I tried to get money to get it patented. I couldn't
58 raise funds to get it patented at that time, but kept it laid away closely, with the intention of getting it patented as soon as I could. After they got their right secured, I came to Boston, and I think I went to Mr. Ezra Lincoln, jr.'s office to see their specification. I think I saw it, and read and saw what their claims were. Then I went and saw Mr. Eddy, and asked him if there was any chance for me to get my right, notwithstanding their patent. He heard my story, and told me he thought there was a fair chance for me to get the right myself, and offered to do the business for me if I would pay him a hundred dollars. I went directly home and tried to get the money. Could not obtain it.

Int. 30. Did any persons see your machine (the one of 1841) during the next three or four years after you built it? If so, who were they?

Ans. They did. Ansel Oaks, Stephen Oaks, Henry Waite, and John Thresher. They are now all dead excepting Mr. Thresher.

Int. 31. How came they to see it when you were keeping it from being seen generally?

Ans. I wanted them to see it, to be witnesses that I had such a machine. I called them in for that purpose.

Int. 32. Did you ever take a patent on the spoke machine which you built after that?

Ans. I did.

Int. 33. How do you fix the time when you built your first machine which you have spoken of?

Ans. I got it up first for the purpose of making spokes; after that I put in another sort of cutters in the same cylinder, by which I stuck sash and ploughed out the grooving stiles of the door pieces to put into panels. In December, 1842, I made doors and sash, and sold them. I fixed the time of selling by referring to my books, from which I extract as follows: (The witness here produced a small memorandum book, from which he read what he said was a copy from his books of original entry,) as follows: (Mr. Browne, counsel for complainants, objecting for incompetency,) "December, 1842, sold Mr. How. Enfield, doors and sash, $4;" and further, "January 25, 1843, sold Mr. Newton 66 lights sash." I copied these entries from my book just before I started to come down here.

Adjourned.

59 Cross-interrogatories by Causten Browne, esq., in behalf of the complainants:

SATURDAY, *March* 19, 1864.

Cross-int. 1. After you got up your second machine in the spring of 1844, as you say, the one which was designed mostly for spokes what did you do with the previous one?

Ans. I laid the carriage aside soon after I first got it up, as soon as I had tried it sufficiently; it was there in the shop all the while; the whole machine was there.

Cross-int. 2. Do you mean that your first machine, that which you say you got up in 1841, was laid aside soon after it was built and had been tried?

Ans. The carriage part was.

Cross-int. 3. Was the rest of it put and kept in use at that time? I mean right along from the time it was got up, which you say was in 1841?

Ans. I wouldn't say that it was used all the time; it was used occasionally.

Cross-int. 4. On what sort of work was it used, as you say, occasionally?

Ans. On sash and doors.

Cross-int. 5. With the exception of sash and door work, was it used at all until the time when you got up your second machine in the spring of 1844, as you think?

Ans. I don't recollect as there was much done with it; I might possibly have worked out a few saw-frames, or something like that; couldn't certainly tell now.

Cross-int. 6. Can you produce a spoke, or a saw-frame, or anything else which was made upon your first machine before the time when you got up your second?

Ans. I think I can. The witness here produced the two pieces marked on the end, Powers No. 3, H. F. S., com'r, and said: "This was made on that machine soon after 1841, between that and 1844; it was in one piece; I sawed it in two for convenience in bringing it down; I have other pieces like that, and a piece of a saw-frame, and another piece more like a spoke than the one produced."

Cross-int. 7. Are these all the pieces of this description done upon that machine before 1844 which you have in your possession?

Ans. There may be more than what I have spoken of lying around among the old timber in the shop; I couldn't tell you precisely.

Cross-int. 8. Where did you find the pieces you have produced, and the other pieces which you have at home?

60 Ans. They lay behind an old chest that I have in the shop, and have laid there ever since they were worked up.

Cross-int. 9. How happened you to find them there?

Ans. Mr. Simpson asked me if I had any old pieces which I had worked out with the first old machine; I have known they laid there all the time.

Cross-int. 10. Do you know of anybody else who has now in his

possession any spokes or saw-frames, or any similarly shaped articles, or any articles except sash and door work, made upon your first machine, prior to the construction of your second?

Ans. I don't know that I do.

Cross-int. 11. Was the sash and door work made with the use of the carriage marked Powers No. 2, or one like it?

Ans. It was not.

Cross-int. 12. Was the planing on the sash and door work in straight lines from end to end of the work, or did it have a curve like that which is made or attempted to be made in the pieces marked Powers No. 3?

Ans. It was straight work.

Cross-int. 13. Please describe the difference between the carriage marked Powers No. 2, and the carriage which you used for your sash and door work.

Ans. I don't know as I had anything that could really be called a carriage in making sash and doors; I had a number of little contrivances to hold the work; perhaps I could hardly tell all the ways; I simply ran the sash over the cutters and had a little something for it to slide on.

Cross-int. 14. Were the saw-frames which you have spoken of as made previous to the construction of your second machine straight work, or curved in the direction of their length?

Ans. It required patterns to have it operate, so as to leave them in the proper shape.

Cross-int. 15. Did the saw-frame work which you made consist only in the cross-pieces of the frame, that is, the piece which braces the saw between the saw blade and the cord?

Ans. I don't know certainly as I made any other piece except that middle piece; perhaps I might have made some of the lower end-pieces opposite the handle, as they were made as straight as the middle pieces.

Cross-int. 16. Will you produce the piece of saw-frame, and the other piece which you say is more like a spoke than the one produced, and put them in evidence with your deposition? I refer to the pieces which you say you have at home.

Ans. I have no objection to producing them.

61 Cross-int. 17. Did you make the parts of saw-frames referred to with the use of the carriage marked Powers No. 2, or one similar to it?

Ans. I did.

Cross-int. 18. Including the pattern marked *b* in the model?

Ans. Either with the patterns at the side or at the end, as previously described; it was a different shaped pattern from the one on the model.

Cross-int. 19. You say you don't know that you know of anybody except yourself who has in his possession any spokes or saw-frames, or any similarly shaped articles, made upon your first machine, and prior to the construction of your second. Do you know of any

body except yourself who ever did have any of them in his possession?

Ans. I don't know that I do.

Cross-int. 20. Then you never sold any of them?

Ans. I think not.

Cross-int. 21. Did you ever give any of them away to anybody who made any use of them afterwards?

Ans. I don't know that I ever did.

Cross-int. 22. Did you ever use any of them yourself for any such purposes as they were designed for?

Ans. I don't recollect that I ever did.

Cross-int. 23. Is the piece of which the parts are marked "Powers No. 3," a good specimen of the curved work which you did upon the machine previous to the invention of your second machine?

Ans. It is an average specimen of those made from the pattern which will give that shape.

Cross-int. 24. As regards the straightness and smoothness of the cut, and the regularity of the several faces or sides of the work produced, are these pieces, "Powers No. 3," average specimens of the curved work which your first machine did, with the use of any curved pattern which you tried on it?

Ans. It doesn't appear in these that there is much of any regularity about the squares; this was one of the first pieces that I made; I did some work that was square or four-sided, and probably more regular with regard to the squares than these; I wouldn't be understood that those pieces which I could produce would be any more regular than these, (Powers No. 3,) but sometimes, in the course of my experiments, they probably were; I don't know but they (the pieces Powers No. 3) are as smooth as what I made at that time.

Cross-int. 25. Was it the the design of your machine, as regarded spoke making, to reduce the piece to something like a cylinder or oval, which would be afterwards brought to a smooth round surface by other means?

62 Ans. My design was to fetch it to the right shape of a spoke, and then to make it smooth by other means; I did not work out any spokes at that time on that machine fit for market.

Cross-int. 26. Are spokes and the saw-frames, or part of saw-frames, the only articles which you ever made or undertook to make upon your first machine, including the carriage and a curved pattern?

Ans. I planed out several things without much regard to what you would call them, whether spokes or not, to try the cut or operation of the machine.

Cross-int. 27. They were not intended to make anything in particular, were they?

Ans. No, sir.

Cross-int. 28. Will you exhibit your first machine, which you say is in your shop at Greenwich, to the plaintiffs or their agents?

Ans. I have no objection to their seeing it.

Cross-int. 29. Is it in the same condition now in which it was

when you used it, previous to the construction of your second machine?

Ans. The carriage is the same, I think, now that it was then, with the exception that I think there has been a little piece split off from the wood at the index end of the carriage; this arbor, that holds the cutters and cutter-cylinder, is the same, and stands on the same foundation, I think, that it did at that time; there may have been new boxes to hold the arbor, I can't say precisely as to that; the ground work is the same now that it was then.

Cross-int. 30. Who made the model Powers No. 2?

Ans. I made the carriage myself; the other part was made after I got down here by a gentlemen—I don't know who it was; I made the carriage in my shop, and the other part was made in a machine shop in Boston, under my direction and from my description.

Cross-int. 31. Did you ever use your first machine, to do any work upon it, after you got up your second? By the machine I mean the whole machine, including the carriage.

Ans. I don't recollect as I ever did.

Cross-int. 32. Will you exhibit your second machine, which you say is in your shop at Greenwich, to the plaintiffs or their agents?

Ans. I will, if it is necessary.

Cross int. 33. Will you, if you are called upon by them civilly for that purpose? By them, I mean Mr. Hale or Mr. Goodman, or both, with some respectable attorney-at-law, or mechanical expert, or both.

Ans. I shouldn't refuse.

Cross-int. 34. What did you want of the machine to make
63 spokes and saw-frames, and such like articles, prior to the spring of 1844? Were you proposing to go into that manufacture?

Ans. I did propose to go into that manufacture.

Cross-int 35. In the spoke machine you got up in 1844, was the ratchet free to turn in one direction?

Ans. It was.

Cross-int. 36. Do you think you had this second machine built and ready for work at the time when Mr. Goodman came over to see you in 1844, and you had your conversation about his machine?

Ans. I think not.

Cross-int. 37. Did you have it that time so far completed as to show its intended operation?

Ans. The table part had been there for several years, as I have said. As to the other part I should think it was not so far completed as to show its intended operation. Possibly it might have been under way.

Cross-int. 38. By the other part I mean the carriage holding the block, and the pattern and the ratchet, and pawl in the swinging frame. Is that what you mean?

Ans. Yes, that is what I mean.

Cross-int. 39. How long after Mr. Goodman's visit, to the best of

your recollection, was that machine completed so as to be put to work?

(At this point the witness inquired whether, in his answer in the direct examination, he had stated that his second machine was built in the spring of 1844. The record was referred to, and he was told that he had so testified. He then said that he wished to change his testimony in this respect, and to say that it was built in the fall of 1844 or the spring of 1845.)

Ans. I can't precisely say when Mr. Goodman came there to get some work done.

Cross-int. 40. Can't you remember about how much time passed between Mr. Goodman's visit and conversation with you, in which, as you say, he described his plan, and the time when you got your second spoke machine in order so as to do work upon it?

Ans. I should judge that he came over in the summer or fall of 1844, and my machine was finished in the next spring, certainly.

Cross-int. 41. Will you exhibit your third spoke machine, or that which was built about 1849 or 1850, to Mr. Hale or Mr. Goodman, or any respectable attorney or expert in their behalf?

Ans. I will not object if I can have pay for my trouble.

Cross-int. 42. What trouble? What do you want pay for?

Ans. For showing them.

Adjourned.

64 JULY 7TH, 1864.

Direct examination resumed:

(Re-examination of the witness upon new matter objected to by complainant's counsel.)

Int. 1. Since the last adjournment, have you put the machine in operation which you built in 1841, and represented by the model marked "Powers No. 2," and done work upon it?

Ans I have, and have done some work upon it.

Int. 2. Will you state what you had to do to the machine, if anything, in order to put it in working condition? referring to the model in giving your explanation.

Ans. I had to replace the ways marked *a a* in the model, which had been lost off of the machine. In the machine, the slots, instead of being on the plane of the table, as in the model, were made by placing pieces upon the table, between which the guide travelled. These pieces were also lost, and had to be replaced. The rests represented by the brass pieces upon the model also were lost and had to be replaced. I think this was all I had to do, except to put in patterns and knives.

Int. 3. After you had made these repairs, how did the machine differ, if at all, from what it was in 1841, when first made?

Ans. I don't know anything, any essential thing, in which it differed at all.

Int. 4. Will you produce specimens of the work which you have recently cut on the machine as exhibits in the case, and state when

they were cut, and how far they are fair specimens of all that you cut?

Ans. (The witness here produced three pieces, marked respectively "Powers No. 4, 5, 6, H. F. S., com'r," and said:) Nos. 4 and 5 were cut on Tuesday, July 5, 1864, and No. 6 on the next day. They are no better than what I can cut again at any time.

Int. 5. Did you run the machine on any other days except Tuesday and Wednesday last, and how many pieces have you cut in all since you put the machine in operation?

Ans. I think I cut some on Friday last, and know I did on Saturday, but I can't tell how many pieces I did cut.

65 Cross-examination resumed—de bene esse:

Cross-int. 1. When were the repairs you speak of made?

Ans. Made last week.

Cross-int. Between the time when your cross-examination was concluded, which was the 19th of March last, and the time these repairs were made, did the machine remain at your house and in the same place where it was at the time you previously testified?

Ans. It did. It remained in the same place. I had not done anything to it.

Cross-int. 3. Was anything done to it by anybody, to your knowledge, during that interval, in the way of repair, alteration, or arrangement?

Ans. There was not a thing done to it until after Tuesday noon, certain.

Cross-int. 4. Tuesday noon of last week?

Ans. Yes, sir.

Cross-int. 5. And what was then done was the beginning of the repairs you have mentioned, was it?

Ans. It was.

Cross-int. 6. Who assisted you, if any one, in making those repairs?

Ans. I made them myself.

Cross-int. Was any one with you looking on at any time while you were making them? If so, who?

Ans. There wasn't anybody constantly. I don't know but that my boys might have happened in there once in a while, or something like that. I believe Mr. Thresher was in there. I think of no one else who was in there.

Cross-int 8. Who, if any one, requested you to make these repairs?

Ans. Mr. Stimpson.

Cross-int. Did you have any conversation with Mr. Lyman Wheeler upon the subject of the repairs to be made, either before they were made, or while they were making?

Ans. He came there when Mr. Stimpson came. I don't remember that he said anything particular upon the subject.

Cross-int. 10. How long were they there on that occasion?

Ans. I should think from fifteen minutes to half an hour.

Cross-int. 11. Was Mr. Wheeler present at any time during the cutting out of the work which you have mentioned as done on Tuesday and yesterday?

Ans. He was present when pieces numbered 4 and 5 were cut out.

Cross-int. 12. Did he take any part in doing the work or assisting in any way, and how?

66 Ans. He didn't do anything. He sat looking on and seeing me doing the work. He spoke about the patterns not being put on quite so solid as they might be. He thought there was a little tremble to them, and I believe he just tucked under a mite of a shaving into one place where it wasn't exactly solid. He didn't use the machine to do any work.

Cross-int. 13. How long was he at your place that day?

Ans. I should think an hour. It might have been a little longer than that.

Cross-int. 14. State as nearly as you can how many pieces have been cut on this machine since the repairs were made?

Ans. I guess there have been five or six something like these (the exhibits) different pieces, and several pieces of board or plank put in to try the pattern, and not completed.

Cross-int. 15. Do you think you did not make or try to make as many as ten legs? By legs I mean pieces of wood having an irregular curve lengthwise, and having a number of flat sides, as these exhibits have.

Ans. I don't know but there were as many as ten different pieces. I did some of these several times over in altering the shape of the pattern. I don't mean the exhibits, but some similar to them.

Cross-int. 16. What do you mean by altering the shape of the pattern? How did you alter it, and why?

Ans. I altered it to make it look decently well. I altered the curve mostly. The pattern I made No. 4 with, first went straight down, afterwards I altered it and made a curve at the smaller end.

Cross-int. 17. What was it you wanted to make look decently well?

Ans. The pieces produced as exhibits.

Cross int. 18. Were the other leg pieces which are not produced here as exhibits, pieces which were put through the machine as these exhibits were, only with differences in the pattern?

Ans. They were. There might be some not turned entirely round or planed on all sides.

Cross-int. 19. Where are those other leg pieces? I mean the rest of the leg pieces which were put through the machine besides those which are here produced.

Ans. There is one piece up at the house, and the others are down at the shop.

Cross-int. 20. You say the ways on which the carriage moved, the pieces between which the guides ran, and the rests, were all lost off the machine and had to be replaced. Where are those pieces which were lost; when did you last see them?

67 Ans. I am sure I don't know where they be. They possibly may be, some of them, in the shop among the rubbish. I can't tell. I havn't found them. I don't know that I have seen them since I took them off at the time I got the second carriage.

Cross-int. 21. By the second carriage do you mean the spoke machine you got up in 1844 or 1845?

Ans. Yes.

Cross-int. 22. What did you do with the pieces referred to after you so took them off at that time?

Ans. I don't know as I recollect now what I did with them.

Cross-int. 23. Did you put them to any use? If so, what?

Ans. I don't know as I did.

Cross-int. 24. You have spoken of these pieces being lost, and your having to replace them when you repaired the machine last week. Were there any other parts of the machine which, although remaining on the machine and not requiring to be replaced, were out of order so as to require repairing, or which were in fact repaired? And if so, state what such parts were, and what you did to them.

Ans. I think not.

Cross-int. 25. Do you mean that all the parts of the machine, except those which you replaced, were in perfect working order when you took hold of the machine to prepare it for operation?

Ans. I think they were; a box got worn a very little; I turned a screw and tightened that. I don't think of anything else.

Cross-int. 26. Where has the carriage part of this machine been from 1844 to 1864?

Ans. It has been in the shop.

Crost-int. 27. In what part of the shop?

Ans. It was lying up in the garret a considerable part of the time—the last part of the time. I think the carriage for a spell lay under the machine.

Cross-int. 28. How long had the carriage been lying in the garret, as near as you can tell?

Ans. I don't know but it laid there all the time after I removed it from the other part of the machine. I can't tell. It might have laid in some other parts of the shop before it was laid in the garret.

Cross-int. 29. What did you keep in the garret?

Ans. I used to throw up things there—pieces of machines and one thing and another.

68 Cross-int. 30. Did you find this carriage in the garret when you undertook to fit up the machine last week?

Ans. I did.

Cross-int. 31. How long were you making the Exhibit No. 4?

Ans. I don't know precisely; two or three minutes. I don't know but that I was four or five about it; perhaps a little longer than that.

Cross-int. 32. Were none of the sides of either the pieces Nos. 4, 5, and 6 passed over the cutters more than once?

Ans. There wasn't either of them, unless it was the smallest piece, and I am not sure whether that one was or not.

Cross-int. 33. What, if anything, was done to these three pieces after they were passed through the machine?

Ans. Not anything to my knowledge.

Cross-int. 34. Have they been in your possession ever since? If not, who has had them?

Ans. Two of the pieces, Nos. 4 and 5, have been in possession of Lyman Wheeler and Moses G. Farmer. The other piece Mr. Thresher and I brought down; he brought it the biggest part of the way—I don't know but all the way, down here.

Cross-int. 35. How long were you at work fitting up the machine last week?

Ans. I commenced clearing away the place for it to stand on Tuesday; I got the pieces on, and I rather think I run one piece through on Friday; I did on Saturday certain.

Cross-int. 36. How much time did you spend in replacing the missing parts, making and altering patterns, and getting the machine into good running order, so as to cut out leg pieces?

Ans. Some two or three days.

Direct examination resumed:

Int. 1. Did Mr. John Thresher ever work for you? And if so, when and how long?

Ans. He did. I think he commenced Nov. 2, 1844, and worked till into February of the next year—I should think the latter part of February.

Int. 2. What means have you of fixing the time?

Ans. I set it down in my book the time he commenced and the time he left off. I have looked at this book recently.

RUFUS POWERS.

69 *Deposition of John Thrasher.*

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is John Thresher; I am forty years old; I live in Greenwich, and I am a farmer.

Int. 2. State whether you ever worked for Mr. Rufus Powers; and if so, when.

Ans. I did; it was nineteen years ago this last winter.

Int. 3. How do you fix the time?

Ans. The fall after I was twenty years old, and father got his fall's work done, he said he would give me my time, and if I had a mind to go and work out through the winter I might have my wages. I went and let myself to Mr. Powers. I was twenty years old in June of the year that I went to work for Mr. Powers. I was forty years old this last June.

Int. 4. If, while you were at work for Mr. Powers, you were present at an interview between him and Mr. Warren Hale and Allen Goodman, state as nearly as you can the time when the interview occurred, and how you happened to be present.

Ans. I was present. I was at work in the mill; I saw a couple of men drive up to a pair of bars near the mill. Mr. Powers came into the mill and wanted I should go to the shop. I told him I would be there directly, as quick as the saw run through. He said there w

a couple of men come there to see him, and he wanted I should take notice of what was said I shut the gate and went over to the shop. Two men came in that he called Mr. Hale and Mr. Goodman. I did know Mr. Goodman by sight, but never saw Mr. Hale before to know him. They wanted to see a machine Mr. Powers had. Mr. Powers wouldn't show it. Mr. Hale talked with him there quite a spell—I couldn't say how long. This I should think was in the fore part of December, as near as I can recollect.

Int. 5. How do you fix the time when the interview took place?

Ans. I had been there a spell to work, and it was bare ground. They came with wheels; there was no sleighing.

Int. 6. Can you state more particularly the conversation between the parties? If so, will you do it, giving the substance of conversation, if you are unable to give the language?

Ans. I can't give the language. All I can state is that they wanted to see a machine that Mr. Powers had. Can't say what kind of a machine; that is, I don't recollect as they told what kind of a machine.

Int. 7. How long were they there?

70 Ans. To my best recollection they were there from an hour to an hour and a half.

Int. 8. If after they went away Mr. Powers showed you a machine, state what machine it was, and whether you have ever seen the machine since; and if so, when. If he gave any reason for showing the machine to you, state what it was; and what, if anything, he said in respect to the machine at the time.

(Objected to.)

Ans. He showed me a machine. As they were there I was sitting upon a box near the stove, and after they had gone he said he had got a machine that he wanted to show me. He said he guessed he should have to trouble me to get up, and I did so. He took off a long box that lay upon a bench, and there the machine was. He said he would show me how that machine would work, for he didn't know but that there would be trouble about it some time. He said that was the machine that Mr. Hale and Mr. Goodman wanted to see. He got a stick of timber and planed out a stick in an irregular shape. I have seen the machine since then at his shop. I saw it a short time after Mr. Hale and Mr. Goodman were there, when he took in Mr. Stephen Oaks, perhaps a week or fortnight afterwards. I havn't seen it since till last March, that I recollect of. I saw it again last Saturday, and yesterday.

Int. 9. Did Mr. Powers, either while Mr. Hale and Mr. Goodman were present or immediately after they left, when he was showing you the machine, give any reasons for not showing the machine to them? If so, state what they were.

(Objected to.)

Ans. I couldn't say that he did while they were there, but he did give reasons afterwards. He said they had got up a machine to plane piano legs; and he said that they agreed to take out a patent with him, to take it out together, and that it would come cheaper; that

they had sent in their names and left his out; and he should run his machine if they did get theirs patented. He said that he had his machine out before they did theirs; he had had it, he said, between two and three years.

Int. 10. At the time when Stephen Oaks was present did Mr. Powers give any reason for showing you the machine? If so, state what it was.

(Objected to.)

Ans. He wanted to get evidence that he had such a machine; this is all that I recollect now.

Int. 11. Did he run the machine at that time?

Ans. He did.

71 Int. 12. How much did he run, and what did he make on it?

Ans. Perhaps he planed out two or three sticks in an irregular shape—perhaps not more than one; but I should think two or three. I don't know what he made on it.

Int. 13. Since that time has your attention been called to the interview with Messrs. Hale & Goodman at which you were present, and your seeing the machine? And if so, by whom, and how often?

Ans. My attention has been called to it. Mr. Powers wanted I should look at the machine, to see if I thought there had been any alteration in it since I worked for him. Mr. Powers has mentioned to me several times if I recollected about the machine. He said there might be trouble yet about it. I should think he hadn't said anything for four years until this last March.

Int. 14. When you saw the machine in March last, what difference was there between its condition then and its condition when you first saw it?

Ans. I think I didn't see the whole of it last March. I saw the carriage part. That was the same as it was when I saw it years ago.

Int. 15. When you saw the machine last Saturday and yesterday, did you see the whole of it? And if so, state how it differed, if at all, from what it was when you first saw it.

Ans. I saw the whole of it. It didn't differ any from what it was when I first saw it, according to my best recollections.

Int. 16. Did you see work done upon it Saturday, Tuesday, and Wednesday, and if so, what kind of work? Did you bring any work that you saw done on it with you to Boston; and if so, will you identify it?

Ans. I did see work done upon it. He planed out something. I suppose he called it the imitation of a piano leg. He seemed to talk about piano legs, and not about anything else; and that, I suppose, is what he meant to make. I brought to Boston with me the piece marked "Powers No. 6, H. F. S., com'r," (an exhibit in the case,) which was planed out on the machine yesterday; and I saw some other pieces planed out—some like the piece produced as an exhibit, and marked "Powers No. 5," and I think one piece shaped like No. 4, (exhibit,) but not so large.

JOHN THRASHER.

72 *Deposition of Amasa Dexter.*

Int. What is your name, age, residence, and occupation?

Ans. My name is Amasa Dexter; am fifty-four years old; I reside in Orange, Massachusetts; I am a farmer.

Int. 2. Where did you reside in 1840, 1841, and 1842?

Ans. I resided in Wendell.

Int. 3. Did you know Mr. Lyman Wheeler at that time? How near to him did you live, and were you in the habit of visiting his shops?

Ans. Yes, I did. I lived, I should think, within an eighth of a mile of him. I was in the habit of visiting his shops.

Will you look at the models now shown you marked "Wheeler No. 1, 1840, H. F. S., com'r," and state whether you recollect seeing any such machines in Mr. Wheeler's shop, and seeing him use them in connexion with his lathe? And if so, for what purpose?

Ans. Yes, I did. I have seen them; I have seen him use them with his lathe; I saw him work out such shaped handles as are shown in the model.

Int. 5. Will you state whether, according to the best of your recollection, this model is or is not a correct representation of the machines you saw, in all its parts? And if there are any differences, point out what they are.

Ans. That is as near as my recollection can carry the thing.

Int. 6. How often did you see Mr. Wheeler use it?

Ans. Very frequently I used to see it.

Int. 7. What kind of articles did he make?

Ans. I saw him make handles similar to that in the model.

Int. 8. Can you give any idea of the number of handles that you saw him make?

Ans. I could not give any definite number. I saw him make two.

Int. 9. Is that any particular two that you refer to?

Ans. He made these two for me.

Int. 10. Have you any memorandum made at the time which enables you to fix the time when those two were made? If so, will you state what it is?

Ans. I have. I have my daily account book, in which I find the following entry made by me at the time: "November 22d. 2 chisel handles, 12 cents." The date of the year at the head of the account shows this to have been made in 1840, which is the fact.

Int. 11. Will you state what is the date of the first item in your account with Mr. Wheeler?

Ans. April 3d, 1840.

73 Int. 12. State if you know whether Mr. Wheeler made that kind of handles for sale during those years.

Ans. He did.

Int. 13. State whether you saw more than one such machine, or part of a machine, as that marked A.

Ans. I did not see but one.

Int. 14. Did you see him use the machine at any other time except the time when he turned the two handles you have referred to?

Ans. I should think I did—to the best of my recollection.

Int. 15. Did you see the machine itself at any other times when Mr. Wheeler was not using it?

Ans. I did.

Int. 16. Did you see it at more than one of Mr. Wheeler's shops which I occupied in Wendell?

Ans. I did.

Cross-interrogatories:

Cross-int. 1. What was your occupation at the time when you saw this machine of Mr. Wheeler's at Wendell?

Ans. I was a farmer.

Cross-int. 2. Did you ever spend any time, and how much time, in examining the construction and operation of the machine?

Ans. I don't know that I spent any particular set time?

Cross-int. 3. At the time he made the two chisel handles for you, did you particularly examine the machine to see how it worked?

Ans. I saw it work. I stood by it and saw it operate on the stick.

Cross-int. 4. Did you ever examine it at any other time?

Ans. I don't think I did in particular.

Cross-int. 5. Have you had any particular occasion to call to mind this machine and its construction and operation since you saw it at Wendell at the time referred to?

Ans. I have not.

Cross-int. 6. Do you think you could have described the construction and operation of it from memory alone, and without the aid of the models which have been exhibited?

Ans. I think I could.

Cross-int. 7. Are the models the same size as the parts of the machine which they represent were?

74 Ans. They are not. I should say that the machine that I saw then was eight inches from side to side of the carriage.

Cross-int. 8. Of what material was the carriage?

Ans. If my memory serves me right, it was of birch wood?

Cross-int. 9. How did Mr. Wheeler operate the machine when he made the two chisel handles for you?

Ans. It was worked in the lathe.

Cross-int. 10. What was in the lathe?

Ans. What I should call the cylinder, represented by the piece marked B.

Cross-int. 11. How did he work the carriage?

Ans. By a gear that went under the cylinder.

Cross-int. 12. Did he hold the carriage down to the work by hand?

Ans. The idea that I have is that the carriage went under the cylinder.

Cross-int. 13. How was the gear arranged that you speak of?

Ans. To bring the carriage back and forth.

Cross-int. 14. Was it worked back and forth by a crank?

Ans. I have it in my mind that this worked back and forth by the gear.

Cross-int. 15. Please describe more particularly where the gear was.

Ans. The gear was right underneath the carriage.

Cross-int. 16. Did the carriage move along back and forth on a horizontal line?

Ans. It did.

Cross-int. 17. Did the cylinder have a movement up and down?

Ans. I think not.

Cross-int. 18. Do you remember how the cylinder was kept down in contact with the work?

Ans. The idea that I have of it is that it was by raising and lowering the carriage.

Cross-int. 19. How was the carriage raised and lowered?

Ans. By a screw—that is my recollection.

Cross-int. 20. Where was the screw?

Ans. The thing that carried the carriage was let up and down by a screw, to the best of my recollection.

Cross-int. 21. What sort of a thing was it that carried the carriage?

Ans. It was a wheel with cogs in it. There was an arbor underneath with cogged teeth which worked into rack teeth in the under part of the carriage and carried it along.

Cross-int. 22. Where was the screw put which raised and lowered the carriage?

75 Ans. On the end of the carriage.

Cross-int. 23. Was the arbor raised and lowered also at the same time?

Ans. It was not.

Cross-int. 24. Did you see this machine in the shop which Mr. Wheeler had in the back part of the farm-house which he occupied at one time in Wendell?

Ans. I did.

Cross-int. 25. Is it the only machine for cutting out many-sided articles with waving edges which you ever saw him use? I mean articles formed like the chisel handle shown in the model?

Ans. I think it is, if I understand right.

Cross-int. 26. Is the machine which you have just described the only machine which you ever saw in the possession of Mr. Wheeler, or in use by him, for cutting out such formed articles as the chisel handle, which is mounted on the model marked Wheeler No. 1?

Ans. It is.

Cross-int. 27. I observe that the entry which you have quoted from your memorandum book is in a different colored ink from preceding entries on the same page. Are you positive that the entry you have quoted was made at the time, that is, November, 1840?

Ans. I have given you my best recollection.

Cross-int. 28. In the machine you speak of, was the cylinder suspended at the ends in the lathe?

Ans. It was.

Cross-int. 29. In fixed bearing so as to keep its horizontal position?

Ans. Yes.

Cross-int. 30. To what was the arbor underneath, which had the cogged teeth on it, attached? How was it mounted, or in what was it held in position?

Ans. By bearings.

Cross-int. 31. By bearings in what?

Ans. By bearings underneath. I think they were fixed bearings.

Cross-int. 32. Did you ever hear of any other machine which Mr. Wheeler had at that time in Wendell for cutting out articles like the chisel handle shown in the model?

Ans. I think not.

AMASA DEXTER.

76 *Deposition of Sarah C. Chamberlin.*

Int. 1. What is your name, age, and residence?

Ans. My name is Sarah C. Chamberlin; I am sixty years of age, and I reside in North Dana.

Int. 2. Did you ever reside in Wendell? If so, when?

Ans. I did; as near as I can recollect, about twenty-four years ago.

Int. 3. Are there any circumstances connected with the history of your family at that time which enable you to fix the time when you went there?

Ans. Yes; I think that I buried a child soon after. My daughter, I think, is twenty-three in August, and it was about a year before she was born that I buried a child.

Int. 4. Did Mr. Lyman Wheeler live with you, and have a shop connected with your house? and if so, how long after you went there to live was it that he came to live with you?

Ans. He had a shop connected with our house, and he came very soon after we went there. I can't say just how long it was.

Int. 5. Will you state whether you was often in his shop while he was there?

Ans. Quite often.

Int. 6. Did you ever see him make chisel handles or knife handles, or articles of that kind?

Ans. Yes, sir, and various other things.

Int. 7. Will you look at the exhibit marked Wheeler No. 1, and state whether you ever saw him use such a machine as that? and if so, what he used it for?

Ans. I should think, as near as I can remember, that the piece marked B went into a lathe. I recollect the piece marked A well. I think there were some shorter ones. I have seen him use such a machine—I think I have. He used it to turn various things. I have seen him turn chisel handles and knife handles. I have often been in to see him turn them. The piece B went into the lathe and revolved. The other piece, marked A, he shoved over it with his hands. I afterwards saw him use it in the shop which he built on the stream.

Int. 8. Will you look carefully at the piece marked A, and state whether it is precisely like the machines that he used, or how nearly so?

Ans. I should think that it was very much like this.

Int. 9. Will you look at the iron parts, and state whether the machine which he had had such irons upon it as there are upon this?

77 Ans. I recollect that part, (the set screw;) the others I don't recollect about.

Int. 10. Do you recollect whether the handles that he made were eight square handles or not, or had several flat sides?

Ans. I should think they looked like that; (the witness at the time pointing to the handle in the model.)

Int. 11. Did he make any knife handles for you?

Ans. Yes, he did, quite a number.

Int. 12. Were they flat sided handles or round handles?

Ans. They were a square piece with the corners cut off.

Int. 13. Do you remember whether the sides of the handles were straight, lengthwise, or curved?

Ans. They were curved near the socket.

Int. 14. Have you got any of those handles now?

Ans. I have not; they were burned up when our house was burnt.

Int. 15. How many of them did you have?

Ans. Only a set of tea knives.

Cross-interrogatories:

Cross-int. 1. Did Mr. Wheeler marry your daughter?

Ans. He did.

Cross-int. 2. Have you ever seen his machine, or any model of it, or any part of it, from the time he lived in Wendell until you were called as a witness here?

Ans. I can't say as I have.

SARAH C. CHAMBERLIN.

Deposition of Amasa Chamberlin.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Amasa Chamberlin; I am sixty-seven years of age; I reside in North Dana; I am a laborer. Have been a farmer until within a few years.

Int. 2. Where did you live in the years 1841, 1842, and 1843?

Ans. I lived in Wendell.

Int. 3. Did Mr. Lyman Wheeler live with you during those years, and occupy a shop on your premises?

78 Ans. I couldn't say that he did all the time. I think he did not. He had a shop connected with my house part of the time, and part of the time he occupied another shop on my land.

Int. 4. Will you look at exhibit marked "Wheeler No. 1," and say whether you ever saw any machines like that in his shop, and if so, state how nearly they were like it, and whether you ever saw him use them, and what he used them for?

Ans. I should say I had. I couldn't say they were just like it, but they resembled that very much. It was so long ago, I shouldn't

want to say that I have seen him use them. I presume I have years ago. I used to go in there every day. Now that handle looks just as natural as can be. I can't say whether it is the exact image. It seems as if I should know where it came from. I know it is one such as I used to see. I don't know whether I could tell what he used the machine for or not.

Int. 5. Did he ever explain to you what he used the machine for? (Objected to.)

Ans. No more than I told you before. I saw those handles, and asked him how he made them; he pointed to a machine similar to this model, and said he made them with that.

AMASA CHAMBERLIN.

Deposition of S. O. Wheeler.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is S. O. Wheeler; am thirty-one years old. I reside in Orange, Massachusetts, and am a mechanic.

Int. 2. Did you work for Mr. Lyman Wheeler while he resided in Dana, and after he went to Orange to reside?

Ans. I did.

Int. 3. How long did you work for him at Orange, and what did you do for him there?

Ans. I worked for him at Orange, I should think, for three years. I worked mostly on piano and melodeon legs.

Int. 4. What machine did Mr. Wheeler use for planing legs when you first went with him at Orange, and what became of that machine?

Ans. It was the Hale and Goodman machine. He sold it to the Dana company.

79 Int. 5. At the time he sold the machine, or when he delivered the machine, did you have any conversation with him as to what he was to do for a machine to do his work with? If so, state what it was.

(Objected to.)

Ans. I asked him what he would do for a machine when they took his away? He said he would have another one ready in a few days.

Int. 6. Did he go on and build one, or more, machines?

Ans. He did. He built two.

Int. 7. Did you work on the new machines? And if so, how long?

Ans. I did. On one of them. Occasionally from the fore part of winter until the next summer, when he was burnt out.

Int. 8. During that period did Mr. Hale and Mr. Goodman visit the shop where the machines were? And if so, how often?

(Objected to as immaterial.)

Ans. I think they did, several times. Couldn't state how often.

Int. 9. State whether they saw the machines, and whether they saw them at work or not, or saw work which had been done upon the machines?

(Objected to.)

Ans. I think they did see the machines, according to the best of my belief. I think Mr. Goodman was through there when I was at work

on one of them. I think they must have seen the work. There was considerable of it about, sitting near by.

Int. 10. State whether or not the machines were so situated in the shop, that persons going into the shop would naturally or necessarily see them, and the work which had been done on them. State how the machines were situated.

(Objected to.)

Ans. They were on the first floor of the building, near the stairs that went up into the second room. It would be necessary to pass pretty near the machines in order to go up stairs, so as to pass into the other part of the shop. Persons visiting the shop would be apt to see the machines.

Int. 11. Was Mr. Wheeler present at any of the times when Mr. Hale or Mr. Goodman were at the shop?

(Objected to.)

Ans. He was.

Int. 12. If at any such times you heard either Mr. Hale or Mr. Goodman say anything about the machines being an infringement of their patent, or make any complaint about Mr. Wheeler's using them, state what it was.

(Objected to.)

Ans. I don't recollect of hearing any such conversation.

80 Cross-examination:

Cross-int. 1. When was it that you worked for Mr. Lyman Wheeler?

Ans. My memory is not very good as to dates. I worked for him most of the time for three or four years previously to his being burnt out. He was burnt out, I think, about three years ago.

Cross-int. 2. Please state how often Mr. Hale and Mr. Goodman were in the shop where the machines were.

Ans. I couldn't state how often. They were in several times.

Cross-int. 3. Did you ever see either of them examining the machines?

Ans. I don't recollect as I ever saw them take any particular notice of them.

S. O. WHEELER.

Deposition of F. M. Peckham.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is F. M. Peckham; I am twenty-five years of age; I reside in Westfield, and am a pianoforte leg maker.

Int. 2. How long have you been a leg manufacturer, where have you worked, and where do you work now?

Ans. I have worked at leg business for about eight years. I first worked at Dana, then at Erving, next at Westfield, where I now work.

Int. 3. Will you state what your special business is in the establishment where you now work?

Ans. I work on repairs and job work round the shop, any job they want done.

Int. 4. Have you recently assisted Mr. Wheeler in making legs at Westfield? If so, will you point out the legs, to be marked by the commissioner, and designate those which were made by Mr. Wheeler, and those which were made by yourself?

Ans. I assisted Mr. Wheeler in making legs. Those marked Peckham, Nos. 1 to 10 inclusive, H. F. S., com'r, were made by myself. Those marked Wheeler leg, Nos. 1 to 12 inclusive, H. F. S., com'r, were made by Mr. Wheeler, in my presence. The leg marked Oaks machine leg, H. F. S., com'r, was cut on the Oaks machine and those marked table machine, Nos. 1 and 2, H. F. S., com'r, were cut on the table machine built by Mr. Wheeler, the model of which is labelled Stimpson No. 2, H. F. S., com'r.

81 Int. 5. Will you state when and where these legs were made?

Ans. All these legs were made at Stimpson's manufactory at Westfield. Those marked Peckham, Nos. 1 to 4 inclusive, and Wheeler, Nos. 1 to 4 inclusive, were made at the same time, about six weeks since, and the rest, marked Peckham and Wheeler, were made at one time about ten days afterwards. I don't know when the other three legs were made, but they were taken by me from the stock of legs on hand in the factory. The one marked table machine No. 1 is an odd leg which has been lying round the shop for some time, say four months.

Int. 6. Will you state how the legs made by you and Wheeler on the first day were made? Explain the machinery which was used, and how it was used, and point out the machines to be marked by the commissioner.

Ans. In the first place we took of the carriage on the Oaks machine in the shop, and fastened the cutter frame so as to prevent the cutters from rising and falling. This was done by putting blocks under each side of the frame and holding it down by hand screws. We took the long ratchet gear from the old carriage, and fastened it to the bottom of the piece here produced. and marked Wheeler No. 4 B, H. F. S., com'r. it being placed in the notches left in the cross-pieces. The wooden spring marked Wheeler No. 4 C, H. F. S. com'r, was bolted to the bottom of the piece marked Wheeler No. 4 B, by a single bolt, a block being placed between the end of the spring and the bottom of the carriage, and a wooden pin passed up through the hole in the end of the piece marked B, to the under side of one end of the piece marked A, and held the patterns in the piece marked A, up against the cutters; the piece marked Wheeler No. 4 A, then used without the side handles, was fastened by screws in its place between the swinging pieces of the piece marked B; the carriage thus formed was then placed upon the ways of the Oaks machine, passing under the cutter; the leg block was then placed in the piece marked A using the index and centre belonging to the Oaks machine; the carriage was then passed under the cutters by turning the crank, and shape was given to the leg; in this way two legs were cut by me, and two by Mr. Wheeler, being those marked Peckham Nos. 1 and 2, and Wheeler Nos 1 and 4; after cutting these legs we removed the carriage from the Oaks machine, and also took off the cutter frame and turned it the other side up, and made it fast to the frame of the ma-

chine by hand screws. Our object in doing this was to avoid the interference between the work and the cross-piece on the upper side of the cutter frame, as it stood at first; we then took the piece marked Wheeler No. 4 A. H. F. S., com'r, out of the piece marked B, but taking with it the swinging pieces to which the piece A was
82 fastened by screws. We fastened two uprights, one on each side of the Oaks machine, which projected about two feet above the top of the ways; we bored a hole through these pieces, through which was passed an iron roller, upon which the side pieces attached to the carriage marked A rested, as it was moved back and forth; to prevent the ends of the arms from moving up, another roller was placed in the like manner over the first, and the arms were moved horizontally between the two; the leg block was placed in the carriage, using the same index and centres as before; the operater then took hold of the carriage at the tail centre, or foot end of the leg, and passed it over the cylinder, and thus planed one side of the leg; in this way Mr. Wheeler planed the leg marked "Wheeler leg No. 2, H. F S., com'r;" the side pieces belonging to the piece marked B, and fastened to the piece A, as described, were then taken off, and the rolls and their upright supports were removed from the Oaks machine; the leg lock was then placed in the frame, and the operator took it in his hands, holding it by the centres, and resting the tail end of it against his thighs, and in this way the patterns and work were run over the cylinder, and one side of the leg planed; in this way the leg marked "Wheeler leg No. 3," was cut by Mr. Whee'er, and those marked "Peckham Nos. 3 and 4," were cut by myself; in cutting these legs we stood inside of the frame work of the machine.

Int. 7. State whether or not, these legs were all that were cut at at that time, or whether any were spoilt or injured in cutting, which were not produced.

Ans. These eight legs were all that were cut at that time.

Int. 8 At the next time, when you planed the remaining legs which have been produced, what changes, if any, were made in the machine, and in what way were they planed?

Ans. We used the same carriage, the pieces A and B being connected, but with new patterns placed upon the part marked A; we substituted for the wooden spring the spiral spring marked "Wheeler No. 4, D. and used the machine as before, and in this way I cut the leg marked "Peckham No. 7," and Mr. Wheeler cut the leg marked "Wheeler leg No. 6." The machine was taken apart and the cylinder turned bottom side up as before, and the side handles were put upon the piece marked "Wheeler No. 4," as they now stand, and using the machine as before, excepting that the carriage was held by the handles instead of by the centres; the rest of the legs were cut partly by Mr. Wheeler and partly by myself.

Int. 9. How did the spiral spring work, as compared with the wooden one?

Ans. The spiral spring is a great deal better than the wooden one.

Int. 10. What was the iron piece for, on the end of the carriage marked B?

83 Ans. That was to catch the leg or the frame in order to hold the pattern away from the cutters when we were drawing the carriage back.

Int. 11. How does the cutting of these legs compare with that cut on other machines with which you are acquainted?

Ans. The cutting of those legs are better than any machine that I ever run. They are freer from ridges than any machine that I ever run.

Int. 12. State what machines you refer to in this comparison?

Ans. I refer to machines now used by Stimpson & Co., the machine now used by J. E. Stone, of Erving, and to the Dana machine. I never run the machine at Erving, nor the one at Dana, to make a business of it, but I have cut legs on both machines.

Int. 13. What opportunities have you had to become acquainted with the character of the work done on the Dana and on the Erving machines?

Ans. I have laid veneer on work done by both machines. I did the patching after the Dana machine.

Int. 14. What do you mean by the patching?

Ans. I mean patching places where the wood has been thrown off by the machine like the places shown in Wheeler leg No. 6.

Int. 15. How does the patching required on these legs compare with that on work done on the machines to which you have referred?

Ans. There is no more patching on these than on legs cut by any machine.

Int. 16. What care, if any, was used in selecting the timber of which these legs were made?

Ans. There was no care taken at all. The legs were taken just as they came, from a pile of from fifty to seventy-five set. Legs marked "Wheeler leg No. 6," and "Peckham No. 7," will show for itself. There was no selection at all.

Int. 17. State whether any special care was used in preparing the work for planing, or whether the legs went into the machine in the same condition as they generally do in other machines.

Ans. There was no extra care taken at all. The legs went into the machine in the same manner as they generally do on other machines.

Int. 18. Who veneered the legs marked "Peckham No. 8," and "Wheeler Nos. 8, 9, and 10"?

Ans. I veneered them myself.

Int. 19. How did you find them to compare in veneering with legs cut on the other machines to which you have referred?

Ans. I find them a better leg to veneer; legs that I can lay with as little trouble as any legs that I ever veneered.

84 Int. 20. How does the time required in cutting these legs compare with that for cutting similar legs in other machines?

Ans. I cut those legs as quick as I could cut one in the Dana machine or the Oaks machine. It was a new business to me, too, cutting legs in that manner.

Int. 21. State whether any legs were destroyed or injured in cut-

ting those which have been produced, or whether any were cut or attempted to be cut, which have not been produced.

Ans. The legs are all here that we cut or attempted to cut, and there are none here that are damaged beyond veneering.

Int. 22. What is your opinion as to the ability of common workmen acquainted with this kind of work, to plane work daily and constantly upon machines constructed like either of these which you have described? I refer both to the quality of the work and the amount which might be done.

Ans. Any man that is acquainted with machinery at all can, with that machine that cuts under the cylinder, cut a perfect leg the first time trying. I can do with that machine, just as it is here represented, more work than with any machine except the table machine, and do it better—I mean the one cutting under the cylinder. The machine that cuts with the side pieces running between the rollers will cut as many legs as the table machine, and do it with less labor, and cut as good quality of work as any machine running. The machine with side handles passed over the cylinder by hand, marked "Wheeler No. 4," will cut as many legs as the Oaks machine with a little more labor; it is a little harder work, and the quality of the leg is better than the quality of those cut on the Oaks machine.

Int. 23. Why is it harder work on the last-mentioned machine?

Ans. It is like taking a leg and this frame (Wheeler No. 4 A, almost at arms length.

Int. 24. Is there any other reason, except the weight which has to be lifted?

Ans. That is the only objection.

Int. 25. How would it be in doing lighter work, like melodeon legs, with a suitable frame for that work? and with what facility could it be done as compared with other machines?

Ans. With a frame made on purpose for melodeon work, the work could be done quite easy, and four sets an hour can be cut without any trouble.

Int. 27. How many sets are ordinarily cut on the machines at Dana, and at Westfield?

Ans. The Oaks machine at Westfield will cut thirty sets a day of melodeon legs, provided you run it right along every day for
85 that purpose and nothing else. The table will cut forty-five set. I could not tell what the Dana would or does cut.

Int. 28. In cutting the legs which are here produced with the frame marked A, were the conditions under which you were placed in respect to the cutter, favorable or not for doing the work for the best advantage?

Ans. They were not favorable. We had to get in and out of the machine, and standing inside of the machine we were cramped for room.

Int. 29. In carrying the frame over the cylinder and keeping the patterns in contact with it, state whether or not you had any assistance from any other part of the machine, or any guide to assist you in keeping the carriage and patterns in the proper place.

Ans. I had no assistance whatever. The carriage was run over the cylinder without any guide or anything of the kind, nothing except my eye to guide me in keeping it from tipping.

Int. 30. If there were any other difficulties affecting the convenient use of the frame A when used by itself, excepting that mentioned in answer to interrogatory twenty-eight, will you state what they were?

Ans. The means by which the belt was shipped to the false pulley consisted of a strip of wood passing up midway between the sides of the machine, and was used as a lever for shipping the belt from one pulley to the other. This was in my way as I passed up towards the cutter. The machine was too high to work conveniently with it, and I was obliged to put in planks to walk upon, which made the work much easier. There were also fans affixed to each end of the cylinder for the purpose of blowing the shavings from the patterns, and in order to avoid being struck by them on the hand I was obliged to take hold of the handles on the carriage A, at the further end, which brought it to an inconvenient arm's length, and made the work the harder for that reason.

Int. 31. What did the patterns rest upon in using the frame by itself, and what use, if any, was made of the rollers shown in the model marked "Stimpson, H. L. H.," under the cylinder?

Ans. The patterns were run directly over the cylinder, and no use at all was made of those rollers.

Int. 32. Which, in your judgment, would require the most skill and experience in an operater to enable him to use the machine practically in manufacturing legs, the Dana machine, or a machine like frame A, used by itself as you have described?

Ans. The Dana machine.

Int. 33. What was the object of trying the experiment, by using frame A in connexion with the arms and the rollers to hold them at one end, in the manner you have described, for cutting one of the legs?

86 Ans. That was simply an experiment, to see if we could do away with the weight of the machine and leg while holding it in the hands.

Int. 34. How do the legs marked "table machine Nos. 1 and 2," and the leg marked "Oaks machine leg," compare with the work generally done on those machines?

Ans. They are an average cut leg. There was no selection made when they were taken.

Cross-interrogatories:

Cross-int. 1. Was the arbor carrying the knives on the Oaks machine as you used the frame A upon it—that is, with the carriages taken out and the position of the cutting apparatus reversed—a true cylinder, or was it elliptical in shape, like the arbor in the red model marked Stimpson, H. L. H.?

Ans. The cylinder was flatted in the same manner as in the model, but not clear up to the shoulders, leaving a round surface at each end of about three-quarters of an inch in length. The cylinder is slotted as in the model, a little beyond the length of the flat surface.

Cross-int. 2. About how many turns per minute was the cutting cylinder making while you were working out legs with the frame A, having the pattern riding upon and against the rotation of the cutting cylinder?

Ans. I couldn't tell how many turns. I never made any calculation to that effect.

Cross-int. 3. Was it revolving as fast as it does in the regular, ordinary use of the Dana machine and Oaks machine, both of which you have practical acquaintance with?

Ans. The legs were all cut late in the afternoon, when the steam is slacked off and the machinery is not running at the full speed. Some of the legs were cut, the machine running at the regular rate of speed. They were cut from three to six o'clock in the afternoon.

Cross-int. 4. I refer to the legs marked "Wheeler No. 3," and "Peckham Nos. 3 and 4," also to those cut with frame A, using it in the same way, except that it was provided with handles. Were these legs cut with the cylinder running at as high a rate of speed as that at which the other legs you have produced were cut? If not, state as nearly as you can how much lower the speed was in one case than the other. I exclude the table machine legs Nos. 1 and 2, and the Oaks machine leg.

Ans. The speed was about the same.

Cross-int. 5. And how did the speed in both cases compare with the average working speed of the Oaks and Dana machines in their ordinary use?

87 Ans. The speed was about the same as the Oaks machine and the table machine. I don't know how fast they run the Dana machine.

F. M. PECKHAM.

Deposition of Charles S. Chamberlain.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Charles S. Chamberlain. I am thirty-six years old. I reside in Westfield, Massachusetts, and am at present employed in a store there.

Int. 2. Where did you reside in eighteen forty-one, eighteen forty-two, and eighteen forty-three?

Ans. At Wendell, with my father, Amasa Chamberlain.

Int. 3. Did Mr. Lyman Wheeler live there at that time and occupy some part of your father's premises during any portion of the time?

Ans. He did.

Int. 4. State whether during that time you saw Mr. Wheeler manufacture chisel and knife handles; and if so, state generally how he did it.

Ans. I did. He turned some, and he cut some by using a model or pattern.

Int. 5. Will you look at the model marked "Wheeler No. 1, 1840," and state whether or not he used a machine or apparatus like that in making his handles by a model or pattern? and if so, state how he used the machine.

83 Ans. That was to catch the leg or the frame in order to hold the pattern away from the cutters when we were drawing the carriage back.

Int. 11. How does the cutting of these legs compare with that cut on other machines with which you are acquainted?

Ans. The cutting of those legs are better than any machine that I ever run. They are freer from ridges than any machine that I ever run.

Int. 12. State what machines you refer to in this comparison?

Ans. I refer to machines now used by Stimpson & Co., the machine now used by J. E. Stone, of Erving, and to the Dana machine. I never run the machine at Erving, nor the one at Dana, to make a business of it, but I have cut legs on both machines.

Int. 13. What opportunities have you had to become acquainted with the character of the work done on the Dana and on the Erving machines?

Ans. I have laid veneer on work done by both machines. I did the patching after the Dana machine.

Int. 14. What do you mean by the patching?

Ans. I mean patching places where the wood has been thrown off by the machine like the places shown in Wheeler leg No. 6.

Int. 15. How does the patching required on these legs compare with that on work done on the machines to which you have referred?

Ans. There is no more patching on these than on legs cut by any machine.

Int. 16. What care, if any, was used in selecting the timber of which these legs were made?

Ans. There was no care taken at all. The legs were taken just as they came, from a pile of from fifty to seventy-five set. Legs marked "Wheeler leg No. 6," and "Peckham No. 7," will show for itself. There was no selection at all.

Int. 17. State whether any special care was used in preparing the work for planing, or whether the legs went into the machine in the same condition as they generally do in other machines.

Ans. There was no extra care taken at all. The legs went into the machine in the same manner as they generally do on other machines.

Int. 18. Who veneered the legs marked "Peckham No. 8," and "Wheeler Nos. 8, 9, and 10"?

Ans. I veneered them myself.

Int. 19. How did you find them to compare in veneering with legs cut on the other machines to which you have referred?

Ans. I find them a better leg to veneer; legs that I can lay with as little trouble as any legs that I ever veneered.

84 Int. 20. How does the time required in cutting these legs compare with that for cutting similar legs in other machines?

Ans. I cut those legs as quick as I could cut one in the Dana machine or the Oaks machine. It was a new business to me, too, cutting legs in that manner.

Int. 21. State whether any legs were destroyed or injured in cut-

ting those which have been produced, or whether any were cut or attempted to be cut, which have not been produced.

Ans. The legs are all here that we cut or attempted to cut, and there are none here that are damaged beyond veneering.

Int. 22. What is your opinion as to the ability of common workmen acquainted with this kind of work, to plane work daily and constantly upon machines constructed like either of these which you have described? I refer both to the quality of the work and the amount which might be done.

Ans. Any man that is acquainted with machinery at all can, with that machine that cuts under the cylinder, cut a perfect leg the first time trying. I can do with that machine, just as it is here represented, more work than with any machine except the table machine, and do it better—I mean the one cutting under the cylinder. The machine that cuts with the side pieces running between the rollers will cut as many legs as the table machine, and do it with less labor, and cut as good quality of work as any machine running. The machine with side handles passed over the cylinder by hand, marked "Wheeler No. 4," will cut as many legs as the Oaks machine with a little more labor; it is a little harder work, and the quality of the leg is better than the quality of those cut on the Oaks machine.

Int. 23. Why is it harder work on the last-mentioned machine?

Ans. It is like taking a leg and this frame (Wheeler No. 4 A, almost at arms length.

Int. 24. Is there any other reason, except the weight which has to be lifted?

Ans. That is the only objection.

Int. 25. How would it be in doing lighter work, like melodeon legs, with a suitable frame for that work? and with what facility could it be done as compared with other machines?

Ans. With a frame made on purpose for melodeon work, the work could be done quite easy, and four sets an hour can be cut without any trouble.

Int. 27. How many sets are ordinarily cut on the machines at Dana, and at Westfield?

Ans. The Oaks machine at Westfield will cut thirty sets a day of melodeon legs, provided you run it right along every day for
85 that purpose and nothing else. The table will cut forty-five set. I could not tell what the Dana would or does cut.

Int. 28. In cutting the legs which are here produced with the frame marked A, were the conditions under which you were placed in respect to the cutter, favorable or not for doing the work for the best advantage?

Ans. They were not favorable. We had to get in and out of the machine, and standing inside of the machine we were cramped for room.

Int. 29. In carrying the frame over the cylinder and keeping the patterns in contact with it, state whether or not you had any assistance from any other part of the machine, or any guide to assist you in keeping the carriage and patterns in the proper place.

Ans. I had no assistance whatever. The carriage was run over the cylinder without any guide or anything of the kind, nothing except my eye to guide me in keeping it from tipping.

Int. 30. If there were any other difficulties affecting the convenient use of the frame A when used by itself, excepting that mentioned in answer to interrogatory twenty-eight, will you state what they were?

Ans. The means by which the belt was shipped to the false pulley consisted of a strip of wood passing up midway between the sides of the machine, and was used as a lever for shipping the belt from one pulley to the other. This was in my way as I passed up towards the cutter. The machine was too high to work conveniently with it, and I was obliged to put in planks to walk upon, which made the work much easier. There were also fans affixed to each end of the cylinder for the purpose of blowing the shavings from the patterns, and in order to avoid being struck by them on the hand I was obliged to take hold of the handles on the carriage A, at the further end, which brought it to an inconvenient arm's length, and made the work the harder for that reason.

Int. 31. What did the patterns rest upon in using the frame by itself, and what use, if any, was made of the rollers shown in the model marked "Stimpson, H. L. H.," under the cylinder?

Ans. The patterns were run directly over the cylinder, and no use at all was made of those rollers.

Int. 32. Which, in your judgment, would require the most skill and experience in an operater to enable him to use the machine practically in manufacturing legs, the Dana machine, or a machine like frame A, used by itself as you have described?

Ans. The Dana machine.

Int. 33. What was the object of trying the experiment, by using frame A in connexion with the arms and the rollers to hold them at one end, in the manner you have described, for cutting one of the legs?

86 Ans. That was simply an experiment, to see if we could do away with the weight of the machine and leg while holding it in the hands.

Int. 34. How do the legs marked "table machine Nos. 1 and 2," and the leg marked "Oaks machine leg," compare with the work generally done on those machines?

Ans. They are an average cut leg. There was no selection made when they were taken.

Cross-interrogatories:

Cross-int. 1. Was the arbor carrying the knives on the Oaks machine as you used the frame A upon it—that is, with the carriages taken out and the position of the cutting apparatus reversed—a true cylinder, or was it elliptical in shape, like the arbor in the red model marked Stimpson, H. L. H.?

Ans. The cylinder was flatted in the same manner as in the model, but not clear up to the shoulders, leaving a round surface at each end of about three-quarters of an inch in length. The cylinder is slotted, as in the model, a little beyond the length of the flat surface.

Cross-int. 2. About how many turns per minute was the cutting cylinder making while you were working out legs with the frame A, having the pattern riding upon and against the rotation of the cutting cylinder?

Ans. I couldn't tell how many turns. I never made any calculation to that effect.

Cross-int. 3. Was it revolving as fast as it does in the regular, ordinary use of the Dana machine and Oaks machine, both of which you have practical acquaintance with?

Ans. The legs were all cut late in the afternoon, when the steam is slacked off and the machinery is not running at the full speed. Some of the legs were cut, the machine running at the regular rate of speed. They were cut from three to six o'clock in the afternoon.

Cross-int. 4. I refer to the legs marked "Wheeler No. 3," and "Peckham Nos. 3 and 4," also to those cut with frame A, using it in the same way, except that it was provided with handles. Were these legs cut with the cylinder running at as high a rate of speed as that at which the other legs you have produced were cut? If not, state as nearly as you can how much lower the speed was in one case than the other. I exclude the table machine legs Nos. 1 and 2, and the Oaks machine leg.

Ans. The speed was about the same.

Cross-int. 5. And how did the speed in both cases compare with the average working speed of the Oaks and Dana machines in their ordinary use?

87 Ans. The speed was about the same as the Oaks machine and the table machine. I don't know how fast they run the Dana machine.

F. M. PECKHAM.

Deposition of Charles S. Chamberlain.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Charles S. Chamberlain. I am thirty-six years old. I reside in Westfield, Massachusetts, and am at present employed in a store there.

Int. 2. Where did you reside in eighteen forty-one, eighteen forty-two, and eighteen forty-three?

Ans. At Wendell, with my father, Amasa Chamberlain.

Int. 3. Did Mr. Lyman Wheeler live there at that time and occupy some part of your father's premises during any portion of the time?

Ans. He did.

Int. 4. State whether during that time you saw Mr. Wheeler manufacture chisel and knife handles; and if so, state generally how he did it.

Ans. I did. He turned some, and he cut some by using a model or pattern.

Int. 5. Will you look at the model marked "Wheeler No. 1, 1840," and state whether or not he used a machine or apparatus like that in making his handles by a model or pattern? and if so, state how he used the machine.

Ans. He used a machine like this for his eight-square handles. The cylinder represented by the part marked B was put into the lathe, and the cutters revolved. By moving the carriage over the cylinder he gave the shape of one side of the handle. He obtained the other sides by moving the index from notch to notch, and repeating the operation, until he got the handle finished. The carriage was moved over the cylinder by hand.

Int. 6. Will you state whether you recognize the several parts of the model, such as the carriage frame, the screws for holding the handle to be planed, the index, and the parts representing the cutter in the cylinder, as being correct representations of the machine as you saw it? and if there is any difference, point out what it is.

Ans. I should consider it as perfect as could be made. I don't see any difference between the model and the original machine, no difference in the principle of it, nor any way.

88 Int. 7. Have you since that time been accustomed to use machines, and particulary machines for planing pianoforte legs, and have you been accustomed to examine machines so as to understand them?

Ans. I have.

Int. 8. How often did you see Mr. Wheeler use this machine, and if you saw him use it in more than one shop, state what shops they were?

Ans. I couldn't state definitely how often I saw him use it, but it was an every day occurrence, as circumstances might require; I have seen him use it in two shops, and perhaps a third one. One was a shop at my father's house. The other was a shop in a house of his own, which he bought afterwards, in Wendell. After that the machine was taken to a water shop that he built on my father's farm. I am sure that I saw the machine at this shop, but am not certain whether I saw him use it there. I saw the lathe there with a grindstone and jigger saw. The jigger saw I bought myself when Mr. Wheeler moved away.

Int. 9. How often were you accustomed to visit Mr. Wheeler's shops, and what occasion had you to be there?

Ans. I was there about as much as I was at home, nearly half of the time, I should think. Curiosity to see him work tempted me there as much as anything.

Int. 10. Were you in the habit of ever using his tools, or working on his lathe, and did you ever use this machine?

Ans. I was in the habit of using his tools whenever I pleased. I couldn't say whether I ever used the machine or not. I was afraid of meddling with anything which I might damage.

Int. 11. What did Mr. Wheeler do with the handles which he made in the machine. Did he use them himself, or sell them, or give them away to other people?

Ans. He used some himself. His turning chisels were made in the machine. He made a lot of knife handles for my father. He made knife and chisel handles for other people, and for any one who required them. I think he made some for a Mr. Wight, of Ashfield. I don't

know whether he sold or gave them away generally. I think he gave them to Mr. Wight, as he was our minister.

Int. 12. Do you recollect ever seeing any part of the machine after Mr. Wheeler moved away from Wendell? and if so, what part was it, and when and where did you see it?

Ans. I think that I do. I saw it in his tool chest at his house when he lived in Greenwich. I think it was the carriage part, with the index, but couldn't be positive. There were different sections of other machines, from Wendell, everything, in this chest.

89 Int. 13. Did you ever reside in Greenwich yourself? and if so, when was it?

Ans. I have. I can't fix the time exactly, but it was somewhere near 1848 to 1850, as near as I can recollect.

Int. 14. While you were there did you ever operate a machine for making spokes? and if so, state for whom you worked, where the machine was, and state generally the character of the machine, what its several parts were, and how it operated.

Ans. I did. I worked for Rufus Powers. The machine was in a small shop on the south side of the stream of his mills, up stairs. The machine was like the model which is now shown to me, and marked "Powers No. 1, H. F. S., com'r." The part marked C is the pattern of the thing to be made; the part marked A is the part on which the pattern rests when the carriage moves back and forwards, and which gives the shape to the work. I think it was a roller. The part marked B was a cylinder with cutters in it—a revolving cylinder. The part marked D was the part to be planed, to be made into shape. The ratchet wheel turning the pattern and the work was to be turned round from time to time, to get it as nearly as possible to the desired shape. The carriage was shoved backwards and forwards, the work being turned between the movements of the carriage. I have also used this machine to plane out saw-frames.

Int. 15. Did you, after that, work for Mr. Wheeler at Dana in making pianoforte legs? If so, about what time, and how long?

Ans. I did at different times afterwards. It was at the time that he had a job of the company there, making legs. I couldn't say exactly, somewhere in 1854, I should think.

Int. 16. If, during that time, you heard Mr. Wheeler say anything about building a machine on his own plan for planing pianoforte legs, state what he said; and if there was any circumstance which was the special occasion of his speaking of it, state what it was.

(Objected to.)

Ans. I did. Somewhere in the year 1854, I think, he sent to Worcester by me for a copy of some papers from Governor Washburn; when I carried those papers back he told me what it was in regard to. Something about filling contracts on the part of the concern in the piano business there. They seemed to refuse him the privilege of making legs, as near as I can tell from his conversation. I don't recollect just what his conversation was. Then he says that he has got a better machine for making legs, or something like that, and that they knew it. I asked him what that is. He says it is his old

Wendell machine. That is all at that time, I believe. He has referred to that subject—the Wendell machine—several times
90 since. Once at Orange. Mr. Hale, I think he told me, was threatening to stop him. He said he didn't care how quick, for he would have his old machine at work in two weeks. Every time he told me anything about it he said "They knew better; they knew his machine." This last conversation was a year or more after he had bought in at Orange. He was then using the Hale and Goodman piano-leg machine. I should have further stated in regard to the Dana conversation that Mr. Wheeler said "As long as they gave him a good job, he did not wish to hurt the business."

Int. 17. If, at any time, you worked in the shop at Westfield, state when you went there, and how you came to go.

Ans. I can't give you the year, anything further than that it was in the year following the time when Bosworth & Loomis opened the shop—somewhere from the 10th to the 14th of July after they opened the shop. My brother-in law, Wm. N. Oaks, was at work there at the time. He wrote to me shortly after the shop was opened, while I was in Illinois, wishing me (objected to) to come there and go to work—that I could have a good job.

Int. 18. State whether, after you went there, Mr. Warren Hale came there. If so, when, and how many times? and if you heard any conversation between him and Mr. Oaks and Messrs. Bosworth and Loomis, or either of them, state what it was, giving first the conversation at the first visit, if there was more than one.

Ans. Mr. Hale came there, I should think, in October or November, as near as I can recollect. I saw him there twice. The first time Mr. Hale came along, shook hands with me, and passed the usual salutes of meeting one another on such occasions; and then he says to me, I have some notion of coming here and taking hold with you. That was the substance, if not the words. I asked him if that was so. He said it was, if he could find a house to live in, seeming to manifest considerable spirit against the Dana concern. In the meantime Mr. Oaks and Mr. Bosworth came along. I think Mr. Loomis wasn't there; am quite sure he was not. Then Mr. Hale says, I am glad you have got up something that will take them down; and you will do it, too, they being so important, that is, the Dana concern. Then he says that he never regarded the patent good for much any way only to keep others out of the business. The last time I didn't have any conversation with him. This first conversation, the last part of it, was addressed to us all. There were four or five of us stood there. This conversation was in the year in which I first went there.

Int. 19. Did what he said about the thing that would take the Dana people down refer to the piano-leg machine in Bosworth & Loomis's shop? and how do you know that it did?

Ans. Yes, that was the topic of our conversation at the time.

91 Cross interrogatories:

Cross-int. 1. Are you connected in any way, directly or indirectly, with the business of making piano legs and such articles? If so, in what way?

Ans. I am not.

Cross-int. 2. Have you no expectation of being so connected with it?

Ans. I have not.

Cross-int. 3. What was the use made of the little holes in the index-plate in the machine which Mr. Wheeler had at Wendell, represented by the model marked Wheeler No. 1, 1840?

Ans. I couldn't tell you.

Cross-int. 4. Did you not examine the machine, in any of your observations of it, sufficiently to notice that?

Ans. Never sufficiently to know for what purpose they were in. Not being old enough at that time to understand machinery, I never studied into it enough to know.

Cross-int. 5. Are you sure that the block was mounted and held steady by the precise means represented in the model? If not, what parts may have differed therefrom?

Ans. The index was the same, and the set screw for tightening the block up was the same. I think it was the same every way.

Cross-int. 6. Please attend to the language of the question and answer it more exactly.

Ans. I am sure that they were precisely the same, all of them. He had a hub machine fastened in the same way, only that he sawed his hubs instead of planing them.

Cross-int. 7. Are you sure the index-plate had holes through it?

Ans. I think I am very sure.

Cross-int. 8. Are you sure there was the wooden cross-piece close to the small end of the block to be planed?

Ans. I am.

Cross-int. 9. Did you ever see that machine after the year 1840? and if so, where?

Ans. Yes, sir. I saw it in the shop Mr. Wheeler had in my father's building; couldn't tell the year exactly; somewhere from 1840 to 1843. The most I have to judge as to the date is as to the time he went and came away. I also saw it in a shop at Mr. Wheeler's house; also at his water shop on my father's place. I think I saw it after he moved to Greenwich, in his tool-chest. Have known nothing about it since that. If I have, I have forgotten.

92 Cross-int. 10. In what year did you see it, as you think, at Greenwich?

Ans. I couldn't tell; some time after he moved away from Wendell; perhaps a year or two; might not have been so long.

Cross-int. 11. How did Mr. Wheeler keep the carriage with the block down to the revolving cutter?

Ans. With his hands.

Cross-int. 12. Pressing it down with both hands?

Ans. Yes; following it over the cylinder with both hands, according as the speed required.

Cross-int. 13. Are you sure that the small end of the block was held upon the iron rod carrying the index-plate by being jammed on to the end of that rod, as shown in the model?

Ans. I think I am.

Cross-int. 14. Was there any work, other than chisel handles, made by Mr. Wheeler on that machine which he did sell to customers, to your knowledge?

Ans. There was other work made on the machine, but I couldn't say as he sold any of the work. He used to be experimenting on it, trying to see what he could make.

Cross-int. 15. What sort of experiments did you see him try?

Ans. A saw him hold wood on it; boards or whatever it might be—the edges—to cut as his eye happened to run, merely for experiment.

Cross-int. 16. Did you ever see him experimenting with it for cutting such work as chisel handles? and if so, what was he doing?

Ans. I never saw him make any experiments that I know of. I have seen him making chisel handles. What I call experimenting is cutting without any form to cut by.

Cross int. 17. Did he always cut the chisel handles right the first time, or did he occasionally spoil some and have to throw them by?

Ans. I couldn't tell you, as I shouldn't have been able to judge whether a handle was perfect in every respect so well then as I would now, although I used to get occasionally one, I suppose from its being imperfect, but of that I am not able to judge—I don't know.

Cross-int. 18. Did you ever see any chisel handles lying about the shop which had been made on that machine; I mean any of the shops where you saw it?

Ans. I have seen them on tools, and have seen them when he turned them. That is the most. Most generally, when there was a handle that I or my brother could have, we were after it.

93 Cross-int. 19. In what respect were these handles, which you used sometimes to get, imperfect?

Ans. I couldn't tell. They might not have been imperfect; they might have been made out of wood that he had experimented on to show—to let people see him work.

Cross-int. 20. How long did it take him to plane out a chisel handle like that which is mounted in the model?

Ans. That I couldn't tell.

Cross-int. 21. Did you ever see him doing any finishing work on a handle which he had put through this machine?

Ans. I don't know what you call the finishing work. I call the finishing work cutting it out. I have seen him do that a great many times.

Cross int. 22. What other articles did Mr. Wheeler make on the machine he had at Wendell besides chisel handles?

Ans. I don't know of anything that you can call really articles, except chisel and knife handles. I believe he did once make a kind of a saw-boy, he called it—a sort of toy.

Cross-int. 23. Did the knife handles have a number of flat faces and a waving surface, as the chisel handle in the model does?

Ans. Some of them had a number of flat faces, but I cannot recollect whether they waved in the direction of their length. Some of them

were a little thinner near the socket end than at the socket end, as near as I can recollect. I think he made several different shapes of those. My memory is not clear in regard to the styles of the knife handles.

Cross-int. 24. When did you first ascertain that you would be desired as a witness in this case, and from whom?

Ans. It was about eleven o'clock day before yesterday. A boy brought me a letter from Stimpson & Co., desiring me to be at the depot to go on the next train, if possible.

Cross-int. 25. Was the spoke machine mentioned in your direct examination designed to make articles with a number of flat faces, or with a curved or rounded surface?

Ans. It was for flat surfaces, and, therefore, in making a spoke, we had to run it through times enough to get it very near the desired form. Then it would be polished down on a sand wheel or belt.

Cross-int. 26. Whom do you mean by the Dana concern, against whom, as you say, Mr. Warren Hale manifested some spirit in the conversation at Bosworth and Loomis's shop?

Ans. Against the company that was then manufacturing legs
94 there. I don't know what the name was—whether it was Stimpson & Co., or Johnson, Stimpson & Co., I couldn't say.

Cross-int. 27. Can you give any of the language by which, as you think, Mr. Hale manifested some spirit against that company?

Ans. Nothing that I can recollect to give the language of in particular, any more than I have stated—that is, that he was glad they had got up something to take them down; and he spoke about their being so important.

Cross-int. 28. Please name all the persons who stood within hearing of what you say Mr. Hale said in that conversation.

Ans. I don't know that I could name them all.

Cross-int. 29. Name such as you can.

Ans. Mr. Albert Bosworth; I think, Mr. William N. Oaks; and there was a workman there, I think, named Lewis Mason, but I may be mistaken.

CHARLES S. CHAMBERLIN.

Deposition of William N. Oaks.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is William N. Oaks; am thirty-five years of age. I reside in Norwich, Conn., and work in the armory.

Int. 2. Have you ever worked in Dana, Mass., and worked in an establishment for manufacturing pianoforte legs? If so, state when, and in whose establishment.

Ans. I have. When I first commenced, I worked in the establishment of Jonathan Stone, about thirteen or fourteen years ago. I worked for him, as nearly as I can recollect, three or four months. Mr. Stone then sold out to Mr. Warren Hale, and I worked for Mr. Allen Goodman, who worked under a contract with Mr. Hale. Before the contract was up, I think Mr. Hale sold to the Messrs. Stimpson, (I don't know how many of them,) and to Mr. Allen Goodman and Mr. Hammond Doane. I worked, after they bought, for Mr.

Goodman and Mr. Doane. I think I worked for them something like a year. After I left them, I went from Dana to Irving, and worked for Mr. Stone again. I worked a few months, don't recollect just how long, and then went back to Dana again. I should think this was somewhere about the year 1852 or 1853. Soon after I went to Dana I went to work for the Messrs. Stimpson. I think I worked for them some two years. After I got through working for them, I went to Westfield. While I was at work for the Stimpsons they took in other partners, and the name of the firm was changed to Johnson,
95 Stimpson & Co. The partners then were Messrs. George T. Johnson, Charles N. Stimpson, Warren Stimpson, I think Mr. William Stimpson, but am not positive, Mr. S. F. Lindsay, and Mr. Allen Goodman. Mr. Goodman is now of the firm of Warren Hale & Co. Mr. Nelson Bosworth was also a partner I worked in Westfield for Bosworth & Loomis, afterwards Loomis, Lewis & Co. I worked for them about eighteen months. After I got through there I went west; was gone about four months, and then went back to Dana and worked for Johnson, Stimpson & Co., I think for two years. They sold out to Warren Hale. I was at work at the time under a contract for a year I continued to work for Warren Hale & Co., under the same contract. This, I believe, was in 1859. I worked for Warren Hale & Co., under the contract, for, I think, some two or three months. I have not worked in that establishment since that time.

Int. 3. Will you state whether, subsequently to that time, you knew of any negotiations between parties at Dana for the formation of a company to manufacture pianoforte legs at Dana, and for the purchase of an establishment at Westfield for the manufacture of legs there? If so, state when such negotiations commenced, and between what parties, and what were the first steps taken in the negotiation.

Ans. I knew of something of that kind. The negotiations commenced a few days before I left Dana in, I think, September of 1859. The first steps that I knew of were that Mr. Charles N. Stimpson came to my house and said (objected to) that Mr. Warren Hale had proposed to him to take an interest in the concern of Warren Hale & Co., at Dana. I asked him if he was going to do it. He said he thought not. I asked him why. He said his interest would be so small that he thought it would not be any object to him. I urged him some to go in. He said that he thought he shouldn't do it. I said to him "Why don't you go and buy out a concern in Westfield engaged in the same business, and put the two concerns together, and that will make business enough for them all?" The idea seemed to strike him favorably. He asked me if I thought they (Loomis, Lewis & Co., at Westfield,) would sell. I told him I thought they would. We had some further conversation. He said he would go down and talk the matter over with Mr. Hale. In about an hour, I should think, he came back and said that he had had some conversation with some of the parties, and that it seemed to strike them favorably. He said they wished me to come down at the office in the evening. I told him I would be there, and accordingly I went down. I found Mr. Warren Hale there, and I

think Mr. Lorenzo Hale, and I think Mr. Allen Goodman. These parties were of the firm of Warren Hale & Co. I also found Mr. George T. Johnson, Mr. Joseph Fales, and Mr. Charles N. Stimpson.

96 I think these were all the persons present, but am not positive. They said they wished to see me because I was acquainted with the parties who owned the concern at Westfield, and wished to know what I thought about it—whether it could be bought at a fair price. I told them I thought it could. They wished to know at what price. I told them I thought the real estate and machinery could be bought at first cost, about twelve thousand dollars. They wished then to know if I would like an interest. They said that they all proposed to go in together if that property could be bought, and make seven shares of it. I think there wasn't much more done of any importance that night. After some general conversation the meeting was adjourned to the next morning, I believe. The next morning we met according to the adjournment, and I think Mr. Warren Stimpson was present in addition to the parties who were there the evening before. At that meeting it was arranged to send down some parties to Westfield to see if they could buy the property.

(Counsel for the complainant seasonably objected to all that part of the foregoing answer which relates to conversation between the witness and Charles N. Stimpson, neither of the complainants being present, as incompetent and irresponsive.)

Int. 4. If any agreement was made at that time about what should be done in case the Westfield property could be bought, state what it was.

Ans. There was an agreement to this extent, that if the property could be bought, the two concerns, the one at Dana and the one at Westfield, should be put together; that it should be divided into seven shares; that Mr. George T. Johnson should have one share, Mr. Warren Hale one share, Mr. Lorenzo Hale one share, Mr. Charles N. Stimpson one share, Mr. Warren Stimpson one share, Mr. Joseph Fales one share, Mr. Allan Goodman one-half of a share, and that I should have one-half of a share myself. It was further agreed that Mr. Charles N. Stimpson and myself should go to Westfield and carry on the business there. There was some conversation, but I think no positive agreement that Mr. George T. Johnson should go to New York and open a wareroom for the sale of the manufactured legs. There was no firm name agreed upon, but the business at the two places was to be carried on partly separate and partly together. It was to be carried on in two separate names, and to be understood in the market as two separate concerns; as among themselves it was to be one concern.

Int. 5. Was there any limit fixed as to the price which should be paid for the Westfield property, and any instructions given to the parties who were to go there as to making the purchase if the price was satisfactory? and if so, what were they?

97 Ans. There were no limits to the price, I believe, nor any instructions that I knew of.

Int. 6. Who were the parties selected to go to Westfield to see about the purchase?

Ans. Mr. Charles N. Stimpson, Mr. Joseph Fales, and myself.

Int. 7. State where Mr. Fales resided, and what were his relations to any of the parties interested.

Ans. Mr. Fales resided in Troy, New York; he was a brother-in-law, I believe, of Mr. Warren Hale, and also to Mr. George T. Johnson.

Int. 8. State whether you went to Westfield, and when, and what you did there.

Ans. We went to Westfield. I think we started the day on which we had the second meeting. Mr. Fales, I believe, did not start until the next day; Mr. Stimpson and myself stopped at Northampton over night; the next day we met Mr. Fales at Westfield; Mr. Fales and myself went to the factory of Loomis, Lewis & Co., and after some conversation with the parties, Mr. Loomis proposed to sell out to us; we had some further conversation, and we were joined by Mr. Stimpson at the factory; we finally made arrangements to buy them out; we agreed to pay ten thousand dollars for the real estate and machinery, and to take the stock on hand at cost, and the manufactured goods on hand at a small advance I believe above cost; we paid two hundred dollars down, and agreed to pay one thousand in a week, and the balance at different times; after we had completed the trade, the next day after, Mr. Charles N. Stimpson went back to Dana; I stayed for the purpose of taking account of stock.

Int. 9. Will you state whether the agreement for the purchase of the property was in writing or not?

Ans. We took a bond for a deed to be given after certain payments were made, and we signed an agreement to purchase, but whether it was in that bond or in a separate paper I do not recollect; I don't recollect whether we gave notes at that time, but I think we did; the agreement was signed on our part by Mr. Charles N. Stimpson, Mr. Joseph Fales, and myself.

Int. 10. Did any of the parties to the arrangement made at Dana visit Westfield after that? If so, who were they, and when did they come, and what passed between them?

Ans. Some three or four days, I should think, after Mr. Stimpson and Mr. Fales went back to Dana they returned to Westfield again, and Mr. George T. Johnson and Mr. Warren Stimpson came with them; Mr. Charles N. Stimpson said to me that (objected to) he wished to give up his interest; (it not appearing that either of the complainants was present, the counsel for the complainants
98 object to further statements of what was said;) I asked him what he meant by that; he said he meant what he said; Mr. Fales joined us about that time, and we had some further conversation in regard to Mr. Stimpson's giving up his interest; I didn't learn why he wanted to give up his interest, but learned that there had been some difficulty about forming the company; very soon after that Mr. George T. Johnson and Mr. S. F. Lindsay came to the factory, and wanted to see me, they said; we went down below into the boil-

er-room; Mr. Johnson said (conversation of the parties mentioned objected to as above) that Mr. Stimpson seemed to be somewhat dissatisfied, and wished to go out of the concern; he asked me if I was willing that he should; I told him that I didn't know; I hadn't had the particulars; I told him I wasn't willing he should go out until I knew his reasons, and what he was dissatisfied about; Mr. Johnson then told me that Mr. Lindsay had proposed to take a share, making one share more, or eight shares in the whole; Mr. Lindsay then joined in the conversation, and said that he would step into Mr. Stimpson's place if I would consent; I told him that if Mr. Charles N. Stimpson went out, Mr. Warren Stimpson would go too; he said let him go; I said to him that that would break up the arrangement that was made for dividing the shares; he said they could make a new arrangement; I asked him what they were going to do with me; he said that my interest should be protected; I told him that I should prefer to have both of the Mr. Stimpsons stay in, and that I thought they might arrange it to have them stay in, and be satisfactory to all parties; Mr. Johnson said that he had no objection to Mr. Stimpson's staying in, and would like to have him; he said he didn't believe the company could be formed without letting Mr. Charles N. Stimpson go; I told him that I didn't believe then that it could be formed until I understood the matter better than I did then; Mr. Lindsay said he didn't know what my prejudices were, and why I wouldn't let Mr. Stimpson go; he said he thought my interests would be as safe in their hands as they would be in Mr. Stimpson's; I told him that I had no prejudice, but was better acquainted with Mr. Stimpson than with some of the other parties, and that I considered my interests safe as they were, and that I would let it remain until I found out more about it; he then said to me that we couldn't keep the Westfield concern and run it; he said that Mr. Stimpson was under bonds not to go into the business again; I told him that that didn't make any difference to me, that I had nothing to do with any bonds whatever; I told him that that was not the intention that I had; that I should prefer having the company formed, as was agreed upon when I was at Dana; they still urged me to consent to Mr. Stimpson going out; I finally told them that if we could make satisfactory arrangements, and put them in writing, then I would let Mr. Stimpson go, and that I 99 shouldn't let him go until that was done; that ended the conversation. After that I had some further conversation with Mr. Charles N. Stimpson, and some with Mr. Fales, but nothing was done to amount to anything; Mr. Johnson and Mr. Lindsay left town that night, and Mr. Fales also, I think; the next day Mr. Charles N. Stimpson and myself concluded to go to Dana, and see if we could not make some arrangements, and went accordingly.

Int. 11. Will you state what took place at Dana relating to the organization of the company?

Ans. When we got to Dana, we found Mr. Goodman and Mr. Lorenzo Hale. We told Mr. Goodman what we had come out for, and I told him that I wished the thing could be fixed up so that we could go on with the concern as it was at first arranged. He said that he

wished so too, but he said he couldn't do anything then, as Mr. Johnson and Mr. Warren Hale were gone. If we would stay till they got to home—he thought they would be at home that night—he would have them come up to my house and see what could be done. We stayed till the next day. Mr. Charles N. Stimpson came up to my house the next morning, and he and I waited at my house for some time, until nine or ten o'clock, expecting Mr. Hale and Mr. Johnson and Mr. Woodman. As they did not come, we went down to see what the reason was. Upon going down and seeing Mr. Goodman, we learned from him that they had been at home, but had gone away. I think he said he did not know where they had gone. Then I went to see Mr. Lindsay. He said (objected to) that they had been at home, but had gone away again. I couldn't learn from him where they had gone, but learned from him that they had gone to Barre to take the six o'clock stage. I then went to Mr. Charles N. Stimpson's house, and asked him what we should do then. He said (objected to) we had better go and see Mr. Goodman again. We went and saw Mr. Goodman, and also Mr. Lorenzo Hale. I told them that we came out with the intention of arranging the matter in some way that would be satisfactory to all parties. They asked me what we wanted to do. I told them that I wanted the thing to go along in the shape as it was first arranged. They asked Mr. Stimpson what he wanted to do. He told them that he should prefer to go out entirely, but if the thing could be fixed up so as to have all parties agreed, he had promised me that he would stay. They then asked me if I wouldn't consent to Mr. Stimpson's going out on any terms. I told them that I would if we could first make an arrangement between them and me, and put it in writing. They answered that they couldn't do anything about it. We then asked them why Mr. Johnson and Mr. Hale didn't come up to my house according to the agreement between Mr. Goodman and ourselves. They said they didn't know, I think. We couldn't get any satisfactory answer out of them in regard to their being gone, and not coming up according to the agreement. We then asked them if they knew what the other parties, who were not present, wanted to do. They wanted to know if we didn't see them at Westfield. We told them we saw Mr. Johnson and Mr. Fales, and also Mr. Lindsay. They wanted to know if we didn't find out by them what they wanted to do. I told them that I didn't know that we did. I told them that they made a proposal to me to let Mr. Stimpson go, but, at the same time, Mr. Fales and Mr. Johnson said they should prefer to have him stay in, if it could be made satisfactory all round. Mr. Stimpson then asked Lorenzo Hale and Goodman if they were going to take up with my proposal to let him go. They said that they couldn't do anything about it. He then asked them if they knew when Mr. Hale and Mr. Johnson would be back. They said they didn't know anything about it. Mr. Stimpson then said that it looked to him as though they didn't want to do anything about it, any of them. He told them if they could not make some arrangements, that he should go back and run the Westfield concern, and take the consequences. He said, I suppose you will be

shaking the bond over my head, but I shall run it if I have to pay it. We gave up all further talk with them—said no more to them. We then went back to Westfield.

Int. 12. Did you have any further negotiation with any of the parties in respect to the organization of the company, or in regard to the disposal of the Westfield property?

Ans. We didn't have any further conversation in regard to the organization of the company. In some two or three days, I should think, after we went back, Mr. Fales came to Westfield. Mr. Stimpson asked (testimony of this conversation objected to) him what we should do with that property. He said that he didn't know; we had got it on our hands; he supposed we had got to do something with it. Mr. Stimpson then asked me (objected to) if I didn't think Loomis, Lewis & Co. would buy it back again. I told him I thought that would seem too much like boys' play. He then asked Mr. Fales if he wished to keep the concern and run it. Mr. Fales said that he should like to do so, but under the circumstances he thought that it wouldn't be best. He said that there was a family connexion between him and most of the other parties, and he didn't want them to have any hard feelings towards him. Mr. Fales then said to Mr. Stimpson that he would sell out his interest to him. After some further conversation, it was agreed that we should buy Mr. Fales's interest and give him a Steinway piano, and release him from all obligation. Mr. Warren Stimpson's name was put into the papers between Loomis, Lewis & Co. and ourselves, and Mr. Fales's name was stricken out. I could not say whether this was done by the alteration of the old papers or by the substitution of new. We also gave Mr. Fales
101 a sort of a bond that we would take up a note in the Millers' River Bank. That, I believe, concluded our negotiations.

(So much of the foregoing answer as relates conversations at which neither of the complainants were present, was seasonably objected.)

Int. 13. Was the one thousand dollars which you had agreed to pay Loomis, Lewis & Co. within a week paid within that time? and if so, will you state if you know who paid it, or furnished the money to pay it, or how the money was obtained?

Ans. It was paid within the time by Mr. Fales, I believe. The money, I think, was borrowed at the Millers' River Bank. The note to which I have referred in my last answer was given to raise the money upon. Mr. Fales's name, either as maker or indorser, was upon the note, and either the name of Warren Hale or of Warren Hale & Co. Of this I am certain; and I think Mr. Charles N. Stimpson's name and Mr. George T. Johnson's name, but of this I am not positive. I was not present when the note was made, and did not see it until after it was taken up.

Int. 14. State whether you and Messrs. Charles N. and Warren Stimpson went on with the business at Westfield; and if so, under what name, and how long you remained connected with the company, and what other parties, if any, were connected with it while you remained in it?

Ans. Mr. Charles N. Stimpson, Mr. Warren Stimpson, and myself

carried on the business, under the name of Stimpson, Oaks & Co. I remained connected with the company about six months. There were no other parties connected with the company while I remained in it.

Int. 15. If, during the period that you remained in the company, there were any negotiations with your firm and Warren Hale & Co., will you state what they were?

(Objected to if such negotiations were reduced to writing, as complainants maintain that they were.)

Ans. There were some negotiations in regard to a scale of prices for legs, and also in regard to a license to use certain patents. (The counsel for the complainants objects to evidence of negotiations not terminating in an agreement, as being immaterial, and to evidence of the negotiations terminating in an agreement, as incompetent, because the agreement between the firms mentioned was reduced to writing.) Mr. Warren Hale and Mr. Allen Goodman met Mr. Charles N. Stimpson and myself at Greenfield, by appointment. Previously to this meeting I had been to Dana and talked the matter over with Mr. Goodman and with Mr. Hale, I think. We wished, both parties, to make some uniform scale of prices, and to fix up the business so as to be on friendly terms, and not to interfere with each other's
102 customers. Mr. Hale and Mr. Goodman I think had been to Westfield also, in regard to the same matter, and we had had correspondence. We finally made the appointment to meet at Greenfield for the purpose of seeing what arrangements we could make. After we met there, we made an agreement whereby we agreed to keep our prices as uniform as possible. We further agreed that each party should have an equal share of the work, and that if one party should do more work than another, the party doing the most work should pay to the other party ten cent. on the excess. The paper marked B, and annexed to the bill in the suit in which my deposition is taken, and a copy of which is now shown to me, I believe to be a true copy of the original agreement finally executed at Greenfield.

Int. 16. Will you state whether any other agreement was entered into at that time in relation to other matters? and, if so, whether it was reduced to writing or not? and, if it was not reduced to writing, state what the agreement was.

Ans. There was an agreement in relation to other matters, which was not reduced to writing. It was an agreement to buy some machinery, and a water privilege, and some old iron, I believe, belonging to Mr. Lyman Wheeler, of Orange. The machinery was a machine for making piano legs, constructed according to the Hale and Goodman patent. Mr. Hale and Mr. Goodman had had some conversation with Mr. Wheeler about the purchase of the property, and thought it might be bought for 850 dollars, and pay in pianos. We agreed, Mr. Stimpson and myself, that if they could buy the property and pay in pianos, that we would take the machine and let them have all the rest of the property, and we would give them a piano that was then in Winchester, and a melodeon that was at Westfield; but if they couldn't pay all in pianos, we would keep the melodeon, and pay one hundred dollars in money. I think that was all of that agreement.

Int. 17. Please state whether or not that property was purchased in pursuance of the agreement stated in the last answer; and if not, did you have any further communication with Hale and Goodman on the subject, and what was it?

Ans. The property was purchased, but I think not until after Messrs. Hale and Goodman had written us a letter upon the subject, stating (objected to) that Mr. Wheeler would not sell for the price named, but wanted a thousand dollars. Hale and Goodman thought that seemed too much. (A letter being handed to the witness, he says:) This is the letter I refer to; it is as follows:

103 NORTH DANA, *March 9th*, 1864.

Messrs. Stimpson Oaks & Co.:

GENTS.: We cannot trade with Mr. Wheeler for less than $1,000. Now if you will go our halves and pay one-half of the amount of all above the $850, in addition to what was agreed to at Greenfield, we will close with him and bind him up. Let us hear as soon as possible. We think it is the best thing that can be done, (though it seems too much.) Our prices to J. M. Brunswick were all right, viz: $14, No. 10; $13, No. 17; $12, for No. 4, G. New York folks, $12. The whole expense of extending the patent was $467 35. Please draw your check for $83 67, which makes that correct as agreed.

Truly yours, W. HALE & CO.

I think we made a reply to the letter in writing, but cannot say what it was, and cannot say positively that we answered the letter. I think there were no further communications with them while I was in the company. I sold out very soon after that.

Int. 18. Did you at any time after that have any talk with either of the partners of the firm of Warren Hale & Co. in relation to the purchase of Wheeler's property or of the machine which he had? And if so, what was it?

Ans. I did have some with Mr. Warren Hale. I was in their shop in, I should think, June, 1860, and I saw the Wheeler machine. I said to Mr. Hale: You bought the Wheeler property? That was the first, I believe, that I knew that the trade was completed. He said, Yes. Said I: I thought the machine was going to Westfield. He made the reply that he knew that I thought so, but he didn't calculate to let it go. We had some further conversation, but nothing that was important.

Int. 19. What was the value of that machine as compared with the value of the piano forte and the melodeon?

Ans. The machine, when it was new, cost about $100, I believe. I think the piano cost $300 and the melodeon $100.

Int. 20. Will you look at the paper now shown you, and state whether it was executed by the parties at Greenfield, and whether the agreement C, annexed to the bill in this suit, is a true copy thereof, and whether Exhibit A, annexed to the bill, is a true copy of the paper referred to in Exhibit C as of the date of May 18, 1859.

Ans. This paper was executed at Greenfield by the parties who signed it at the same time that the other agreement was executed, and I think Exhibit C is a true copy thereof, and I also think Exhibit A is a true copy of the paper referred to in this paper.

104 Int. 21. In the agreement which you first referred to as having been executed at Greenfield, it is provided that the relative product of the two parties shall be so arranged by the exchange of orders or otherwise, that the gross products of the one shall not exceed in value the gross product of the other, more than one thousand dollars annually. Will you state what were the relative facilities of the two establishments at that time for producing work, as respected the planing of the work?

Ans. In the establishment at Westfield we had one machine; Warren Hale & Co.'s establishment had two machines. Each of the three machines would do about an equal amount of work. On some patterns the Westfield machine could work a little faster, but not enough to make any great difference in the amount.

Int. 22. If anything was said at the time the parties were at Greenfield in respect to procuring another machine to be used in the establishment at Westfield, will you state what it was?

(Objected to.)

Ans. There was talk about the Wheeler machine; we thought that we should want that machine to enable us to do one-half of the work. I don't know as there was anything further said between Hale and Goodman and ourselves about a machine, except what related to the purchase of the Wheeler machine. Mr. Stimpson and I had some conversation between ourselves in relation to the purchase of the Wheeler machine, and concluded (objected to) that if that couldn't be bought we should have to build another machine.

Int. 23. The agreement, dated March 7th, 1860, authorizes Stimpson, Oaks & Co. to use the improvement under Hale & Goodman's patent for two years. Will you state whether that authority related to the machine made under the Oaks patent, which you had then at Westfield, or to another machine to be used in addition to that?

(Objected to.)

Ans. I understood it to relate to the Wheeler machine, or to a machine which we should build if we couldn't get that.

Int. 24. Was there anything said at that time, or at any time previously, in relation to the Oaks machine at Westfield being an infringement of the Hale and Goodman patent, or anything said about that Oaks machine in connexion with the authority contained in the agreement to use the Hale & Goodman improvement as being the subject to that authority?

(Objected to.)

Ans. There was not, in my hearing or to my knowledge.

Int. 25. Will you state whether the check now shown to you is the check of Stimpson, Oaks & Co? and if so, for what it was

[illegible] (Objected to.)

$150. WESTFIELD, *March*, 186 .

Cashier of the Westfield Bank:

Pay Warren Hale & Co., or order, one hundred and fifty dollars.

STIMPSON, OAKS & CO.

Indorsed as follows: Warren Hale & Co.
Remit to Millers' River Bank.

A. HARDING, JR.

It was given to pay our share of the expenses of getting the extension of the Hale and Goodman patent. That was what our share was estimated to be at that time.

Int. 26. Will you look at the papers now shown you and state for what they were given, and give their contents, and state whether they fix the date at which Mr. Fales sold out his interest in the Westfield property?

Ans. The papers shown me were given, the one reading as follows:

WESTFIELD, *Oct. 6th*, 1859.

For value received we jointly and severally agree to deliver, free of charge, one of Steinway & Sons' 7-octave pianos, same as G. T. Johnson to Joseph Fales, in Troy, N. Y., all in perfect order, within from date, together with a nice stool.

(Signed) STIMPSON, OAKS & CO.,
By C. N. STIMPSON.

and signature cancelled, was given for the purchase of Mr. Fales's interest in the Westfield concern; the one reading as follows:

$30. WESTFIELD, *Oct.* 6, 1859.

For value received we promise to pay Joseph Fales, or order, thirty dollars on demand, with interest.

(Signed) STIMPSON, OAKS & CO.

and signature cancelled, was given for the money that Mr. Fales had paid out as expenses in the purchase of that property. These two papers were given on the day on which we purchased Mr. Fales's interest.

Int. 27. Will you look at the paper now shown you and see if, by means of it, you can fix the date of your agreement to purchase from Loomis, Lewis & Co.?

Ans. This paper was given on the day on which we made the purchase, and is dated Sept. 22d, 1859.

Int. 28. What did you ascertain to be the value of the stock
106 and manufactured goods on hand which Loomis, Lewis & Co. had when the inventory was completed?

Ans. Something over six thousand dollars, I think.

Int. 29. Were you the inventor of the improvement described in the patent issued to William N. Oaks, June 8, 1858?

Ans. I was.

Int. 30. Where were you when you made that invention?

Ans. I was at Dana.

Int. 31. In whose employment were you then?

Ans. I was in the employ of the Messrs. Stimpson.

Int. 32. Did you at any time explain your invention to Mr. Allen Goodman, and have any conversation with him in reference to its being an infringement of the Hale and Goodman patent? And if so, state what passed between you.

(Objected to.)

Ans. I did. I asked Mr. Goodman if he thought it would be an infringement of the Hale and Goodman patent. He said he couldn't see that it would infringe in any way.

Int. 33. State whether or not you explained to him the operation of the machine as a whole, or only that part which was claimed in your patent?

(Objected to.)

Ans. I explained the whole operation of the machine. He said that under the Hale and Goodman patent he did not think they could hold anything except the manner of raising and lowering the cutters, and that that was done with a rack and pinion, and that I had got rid of that by raising them with my elongated pattern or guides; therefore he couldn't see any infringement.

Int. 34. When did this conversation take place, and what led you to explain your machine to him?

(Objected to.)

Ans. I think it was in 1854 or 1855. It was at the time that Mr. Goodman was engaged as a witness in a lawsuit between Stimpson and Doane and a Mr. Brooks, of New York, I believe. I thought that he had got pretty well posted, and I wished, if my machine would not infringe, to make some use of it. If it would, I thought it would be best to drop the idea—not to do anything with it. I think, after that, I had some conversation with him about it, and always with the same result.

Int. 35. Within what period were these other conversations?

Ans. They were all before 1856.

Int. 36. How do you determine that?

107 Ans. I think it was the first of January, 1856, that I started my machine running, and the conversation was all before that.

Int. 37. State whether you explained to him the object that you had in talking with him?

(Objected to.)

Ans. I don't think I did. He had got up a number of different machines at different times, and he always explained them to me, and I did the same when I had any new ideas. I assisted him several times in getting up his models, and advanced some ideas. We were confidential friends.

Int. 38. Had you made your application for a patent at the time when these conversations occurred?

Ans. I had not.

Int. 39. Did he know of your making the application when you did

make it, or during the pendency of the application and before the patent issued?

Ans. I think he didn't know it at the time I made the application, but he knew it before the patent was issued.

Int. 40. State how you know that.

Ans. I had several talks with him about it.

Int. 41. At any of those talk what, if anything, did he say about its being an infringement upon the Hale and Goodman patent?

(Objected to.)

Ans. He didn't say anything about its being an infringement that I know of.

Int. 42. In any of these conversations, state what he said, if anything, in reference to a machine at Gardner, Massachusetts, or with reference to a suit in New York against Brooks?

(Objected to.)

Ans. I one conversation that I had with him, he said that he couldn't hold anything but the raising and lowering of the cutters in the manner that they did, and that he doubted very much whether Stimpson and Doane would get their case in their suit with Brooks, if Brooks had known of the Gardner machine, and had brought it into the case. I think this conversation was in the fall of 1855, just before I left Dana and went to Westfield.

Int. 43. Did you ever see the machine at Gardner to which he referred?

Ans. I saw it once; I think in 1853.

Int. 44. Will you look at the model marked "Haywood, E. Merwin, U. S. C.," and state whether it is a correct model of that machine?

(Objected to as leading until the witness's recollection of the machine has been further ascertained.)

108 Ans. As near as I can recollect about the machine, that is a correct model.

Int. 45. At the time when you first explained your machine to Mr. Goodman, was he a member of the company at Dana which owned the Hale and Goodman patent?

Ans. I think he was bond.

Int. 46. Who were the members of the company at that time, and what was the firm name?

Ans. Charles N. Stimpson, Warren Stimpson, I think, he or William Stimpson, and Hammond Doane. The name of the firm was Stimpson & Doane.

Int. 47. State, if you know, whether Mr. Goodman subsequently became a member of the firm; and if so, when, how long he continued a member, of whom the firm was composed while he was such member, and what was its name.

Ans. Mr. Goodman became a member of the firm some time in the fall of 1854, and continued in the firm until some time in the fall of 1857. The copartners were Charles N. Stimpson, William Stimpson, Warren Stimpson and Allen Goodman. These persons together constituted the firm about two months; not over three. Some time in December, I think, they took in George T. Johnson, Silas F. Lindsay,

and Nelson Bosworth. At that time the name of the firm was changed to Johnson, Stimpson & Co., having previously retained the old name of Stimpson and Doane.

Int. 48. Will you state, more particularly than you have done, your relations with Mr. Goodman prior to 1855, especially with relation to the machines which he constructed or patented?

Ans. I have assisted him in building models and machines. I think that the first model I ever assisted him in building was a model for a machine for cutting legs. After the model was done, I assisted him in building a machine after that model. After building the model, he applied for a patent, and, after building the machine, he obtained it. The machine was his invention. In many points we consulted together to get the best plan. Some time after that I assisted him in building another model, and also a machine. This machine was for turning spokes. He obtained a patent on that also. These are all the machines for which he obtained patents, upon which I assisted him. We built a number of improved machines for the manufacture of different parts of legs, nearly all, I think, that are now in use for the manufacture of legs. Nearly one year, I think, I had a contract in company with him. During that time we got up a good many improvements in machinery for making legs. Some of them I claimed as my improvements, and some of them he claimed as his. But
109 on all of them, we consulted together in getting them up. The next year after I worked for him. That year some improvements were made, and were made in the same way that they were made in the year previous. The leg machine referred to in this answer was what is called a cam machine, and was capable of cutting spiral legs; and it was not made according to the Hale and Goodman patent.

Int. 49. For whom was the leg machine referred to in your last answer made?

Ans. It was made for Mr. Goodman, and was used by him and a Mr. Gibbs. I couldn't say how long; not a great while. I think it went afterwards to York State. There were some parties came there and bought the machine. I think they were New York parties.

Int. 50. What mode was employed in that machine for holding the block to be planed?

Ans. The block was held upon centres with an index the same as in the Hale and Goodman machine.

Int. 51. Did you build the machine which was in the establishment at Westfield at the time when you purchased it? and if so, state when you built it, for whom you built it, and when it was put in operation.

Ans. The machine which was there was built under my orders and according to my plans and directions. It was built in the fall of 1855, for Bosworth & Loomis. It was put in operation January 1, 1856.

Int. 52. If you had any consultations with Mr. Goodman befere building that machine, and in reference to doing so, state what they were, and when they occurred.

Ans. I had some consultations with him in reference to building

the machine. Mr. Bosworth came to me some time in September, 1855, and wished to hire me to go to Westfield and build a machine for him, and take charge of his shop as foreman. I was at work at the time for Johnson, Stimpson & Co. I went to Mr. Goodman for advice, and told him what Mr. Bosworth wanted, and asked him what I had better do about it. He asked me what Mr. Bosworth would pay me. I told him. He said that was better than I was doing there, and that he thought I had better go. He said he supposed I didn't feel under any obligations to Johnson, Stimpson & Co., as they had not done according to agreement on the previous job which I had of them. I asked him if he thought there would be any trouble from my building a machine after my plan. He wanted to know in what respect. I then asked him if he thought that it would interfere with the Hale and Goodman patent. He said he thought it would not. I asked him if he thought the machine would work. He said he didn't see but one difficulty. He thought the cutters might be liable
110 to jump, not having anything to hold them down. We had some further conversation, but nothing of any importance.

Int. 53. What, if anything, did you do in consequence of that conversation?

(Objected to.)

Ans. I immediately wrote to Mr. Bosworth that I would come on the first of October to work for him, and I did go at that time.

Int. 54. State whether at the time Mr. Bosworth applied to you, he had an establishment then in operation for the manufacture of legs, or was only preparing to start a new one; whether he made any inquiries as to whether your machine would be an infringement of the Hale and Goodman patent; and what he said, if anything, in relation to the building of the machine, or the starting of the establishment, if the machine would be an infringement of the patent, and whether or not you communicated to him the opinion and advice expressed by Mr. Goodman, or any opinion of your own based upon that of Mr. Goodman.

(Objected to.)

Ans. Mr. Bosworth had no establishment in operation at that time, but was preparing to start one. He owned the building at that time, and had some stock on hand, chestnut plank. He was preparing to start in the leg business. He asked me if my machine wouldn't infringe on the machine in use by Johnson, Stimpson & Co. I told him I thought it would not. He wanted to know if I was acquinted with their patent. I told him I was. I further told him that I had talked with Mr. Goodman, one of the inventors of the machine, and he thought it wouldn't be any infringement. He said if it would, he didn't want to start a machine on my plan. We had some further conversation, but nothing of importance. My opinion was based partly upon Mr. Goodman's opinion, and partly upon my own judgment.

Int. 55. State how far you were influenced by Mr. Goodman's opinion and advice, in deciding to go to Westfield and build your machine.

(Objected to.)

Ans. If Mr. Goodman had told me that he thought the machine would infringe, I shouldn't have built it. If he had told me that he thought I had better not go to Westfield, I shouldn't have gone. I was very intimate at the time with Mr. Goodman, and his advice had great influence over me.

Int. 56. State whether or not he visited the establishment at Westfield after it was started; and if so, when; and whether he saw or had and opportunity to see the machine, and what he said about it.

Ans. I think about some time in February, 1856, Mr. Goodman visited Westfield; came to the establishment of Bosworth and Loomis, and was about the shop nearly all day. I suppose he saw the machine, but don't know that he did. I was not running the machine at the time myself, but spent most of my time in the veneer-
111 ing department. He looked at the legs, and said that the machine cut them very nicely, but didn't make but very little conversation with me about the business. He had an opportunity to see the machine, if he chose to look at it.

Int. 57. Will you look at the model marked "Stimpson, H. L. H., U. S. com'r," and state how far it is a correct model of the machine at Westfield.

Ans. The machine is a correct model, with the exception of the lever to raise the cutters, and the hangings for the lever. The difference between the machine and the model, in the lever and hangings, consists in a bar running over the lever, and a post on the opposite side of the machine, running up to the bar, the lever being hung to the bar nearer the centre of the bar than the end, there being a catch on the post which is shown on the model, for the purpose of catching the lever when it was brought down, thus holding the cutters suspended. The rod in the machine which connects the lever with the cutter frame has a joint in it, and the lever is also connected to the bar, from which it is suspended by a rod, which also has a joint in it, so that the lever cannot be used to press down the cutter frame, but only to raise it, the whole intent of the lever being to throw the cutter frame up out of the way of the work, while putting it into the machine.

Int. 58. When did you first become acquainted with machines built according to the Hale & Goodman patent, and where?

Ans. I think about 1847 or 1848; at Dana, in the establishment of Warren Hale.

Int. 59. State what means were employed in the machines for holding and turning the work.

Ans. The machine that was then in use had the centres and index. There was a machine that had been used before, in which I believe the legs were placed on a bed, and dogged at the ends. I never saw any index or centres, or any place for them on that machine; I never saw that machine in operation.

Int. 60. Did you ever see any work which was planed upon it, or have its operation as to the manner of holding and turning the work explained to you by either Mr. Hale or Mr. Goodman?

Ans. I have seen work that was said to be done upon it, but I don't

know that it was; Mr. Goodman said that the work was done upon it. I don't know that either of them ever explained the operation of the machine to me. Mr. Goodman showed me the machine, and said that there was quite an improvement in those then in use over that one.

Int. 61. State when and how much you have used machines made according to the Hale & Goodman patent, and how much you have used the *the* machine at Westfield.

112 Ans. I should think that I had used the machine made according to the Hale & Goodman patent from three to four years, myself, at different times since 1849; I have used the Westfield machine myself, I should think, some two or three months; I was foreman in the shop about fifteen months, while the machine was in operation, and had the charge of it all the time. I made all the patterns that were used on it. I was a proprietor in the establishment about six months, and had charge of the machine during that time, and made all the patterns that were made during the six months.

Int. 62. Are you acquainted with the machines now used at Dana? and if so, will you state whether the cutter is raised and depressed by a rack and pinion in the manner described in the patent, or by a lever, and if by the latter mode, how long that plan has been used?

Ans. I am acquainted with the machines. The cutters are raised and depressed by a rack and pinion.

Int. 63. Will you describe the manner of using a machine made according to the Hale & Goodman patent, and also the machine at Westfield?

Ans. In operating the machine at Dana, the workman turns a crank with one hand, which moves the carriage containing the patterns and the work under the cylinder which holds the cutters, the entire length of the carriage. With the other hand he turns a crank, first one way and then the other, raising and depressing the cutters to follow the patterns, thus giving the desired shape to the work. That makes one side of the leg. He then turns the leg on the centre, with his hand, having first slipped the catch which holds the leg in its place while being planed, and then goes through with the former operation, thus finishing another side. He then goes through the same operations until he gets as many sides as required. In running the Westfield machine, the workman takes hold of a crank, which by turning, he runs the carriage through under the cylinder which holds the cutters, the entire length of the carriage, thus forming one side of the leg. The carriage then runs back by a weight which draws it back. He then turns the leg, after slipping a catch from the index on the head of the leg, in the same manner as in the Dana machine, and goes through with the same operation as before, thus getting another side; then repeats the same operation until he gets as many sides as are desired. In both machines, after planing each side, he throws up his cutters out of the way, in order to let the carriage run back. On the Dana machine, the cutters are thrown up by turning a crank, which runs up the cutter frame, with a rack and a pinion, which is the same crank that he uses to raise and depress the cutters when planing.

In the Westfield machine, the cutters are thrown up by the lever which I have previously described.

Int. 64. In the Dana machine, can the cutter be raised and
113 depressed by the pattern, by simply moving the carriage, or does it require the aid of the operator with the crank, and rack, and pinion?

Ans. It cannot be raised by the patterns, but has to be done by the rack and pinion.

Int. 65. In planing, what attention is paid to the patterns by the operator, in using the two machines?

Ans. In using the Hale & Goodman machine, the operator has to keep his attention upon the patterns, and see that the rolls that are attached to the cutter frame, are kept on the patterns all the time while the machine is at work. In the Westfield machine he pays no attention to them whatever.

Int. 66. What is the relative degree of skill or experience required in a workman, in the use of the two machines?

Ans. I have employed men on the Hale & Goodman machine. Some of them in a week would get so as to cut a very passable leg, by close watching; some of them never got so as to cut a leg—after working six months couldn't do it. They couldn't get the two motions which they had to go through with, with their hands, having to turn one hand one way all the time and the other hand, first one way and then the other, sometimes fast and sometimes slow, according to the sharpness in the curves in the work. I should say that an ordinary mechanic would get so as to do fair work in from two to six months. I have employed men on the Westfield machine, and never had a man that I had to watch after the first day, there only being one thing to attend to, and that the running through the carriage at the right rate of speed.

Int. 67. At the time when you went to Westfield with Messrs. Stimpson and Fales, did Mr. Warren Hale say anything to you about making the purchase of the Westfield property? and if so, what was it?

Ans. About the time that we were starting off, I was in the office, and was talking about buying the property. Mr. Hale said: Buy the property as cheap as you can, but be sure and buy it; we had some further conversation, but nothing of importance, I think.

Int. 68. Did you ever have any conversation with Mr. Hale in respect to the reissue of the Hale & Goodman patent? If so, state when, and where, and what it was.

Ans. I had some little conversation with Mr. Hale in Springfield, I think in March, 1863; he came to Springfield and called me out of the armory; he said he had come to see me; he said he had surrendered his patent, and had got a reissue. I asked him what he had got; he didn't tell me what he had got, but said it covered everything. I asked him what it was. He made the same answer, that it covered everything. That, I think, was all the conversation we had in regard to his reissue.

114 Int. 69. If you had any further conversation with him at that time, state what it was.

Ans. He told me that he was going to make those Westfield fellows stand round; he wanted to know how I was with them; I told him I didn't know what he meant; he then said he wanted to know what my interests were, and on what terms I was with them; I told him I was on friendly terms, but had no interest with them in any way; he then said perhaps you will remember the trade about buying Wheeler out, made at Greenfield; I told him I thought I could recollect something about it; he wished me to try and refresh my memory; he said they had not let him have the piano or the hundred dollars in money; he thought he might sue them, and want me for a witness; I think I asked him if they had the Wheeler machine, but am not sure; I think that he said that they didn't have the machine, and that all they (Warren Hale & Co.) claimed was the piano; and that they offset the hundred dollars against the machine. I am sure that I have had that talk with Mr. Hale or Mr. Goodman at some time; I can't say positively that it was at that time—I think it was at that time.

Cross-examination:

Cross-int. 1. Did you receive any money or other consideration from the firm of Stimpson, Oaks & Co. for their use of the Westfield machine containing your patent improvement?

Ans. I did not.

Cross-int. 2. Have you ever received from anybody any consideration for the use of that machine?

Ans. The patent was taken out at the expense of other parties in my name, and they had an interest in the patent, and I owned the balance; the expenses they paid, as they told me, amounted to six or seven hundred dollars; this is all the consideration that I have ever received.

Cross-int. 3. How much was your share in the patent?

Ans. One-third.

Cross-int. 4. Who were the owner of the other shares, and in what proportions?

Ans. Bosworth & Loomis owned two-thirds jointly. I believe.

Cross-int. 15. Did they hold their title by a written instrument?

Ans. They did.

Cross-int. 6. Do they hold it still?

Ans. They do not.

115 Cros-int. 7. Who does?

Ans. Stimpson & Co.

Cross-int. 8. Do you hold the other third?

Ans. I do.

Cross-int. 9. Did you employ a patent agent to get your patent, and whom?

Ans. Messrs. Bosworth and Loomis. Fowler & Wells, of New York, were employed. They kept an agent for the purpose of getting patents. They were, themselves, phrenologists.

Cross-int. 10. Do you know what Stimpson & Co. paid for their interest in your patent?

Ans. The patent—the right—has always been sold with the property. I mean the two-thirds.

Cross-int. 11. Did the two-thirds interest in the patent then make part of the Westfield property, so called, sold by Loomis, Lewis & Co. to the Simpsons and yourself?

Ans. It did.

Cross-int. 12. In making that purchase, was the price fixed by assessing the rest of the property, the two-third interest in the patent being thrown in?

Ans. I couldn't tell how Loomis, Lewis & Co. fixed their price. They first offered to sell for nine thousand dollars; then Mr. Loomis said he had forgotten the expense of getting out the patent, and must have more. We asked him how much more he must have? He said he must have a thousand dollars. That made the price ten thousand. That was what we paid.

Cross-int. 13. Was the nine thousand the valuation of the other property—I mean real estate and machinery?

Ans. I don't know anything about the valuation at that time.

Cross-int. 14. Was that sum the amount which the parties to the purchase agreed upon as the price of the real estate and machinery?

Ans. The parties didn't agree upon that price at all. They offered it for that price, but before we took them up they said they wouldn't take it.

Cross-int. 15. Did they offer at that price the real estate and machinery?

Ans. They proposed to sell out to us, and me asked them what they would take. After a few minutes consultation between themselves, Mr. Loomis said they would take nine thousand dollars. No details mentioned.

Cross-int. 16. Was anything said in regard to the price of the patent, except what was said as reason for requiring one thousand dollars more?

Ans. There was not.

Cross-int. 17. What was your share in the business of Stimpson, Oaks & Co.?

Ans. One-fifth.

116 Cross-int. 18. Did you put in any money?

Ans. I did not; otherwise than notes to the amount of one-fifth of the cost, which notes I paid before maturity.

Cross-int. 19. What did you receive for your interest when you left the company?

Ans. Fifteen hundred dollars more than I had put in.

Cross-int. 20. Was that your share of the profits of the business?

Ans. I don't know anything about the profits. There was no invoice taken at the time I sold out.

Cross-int. 21. De bene esse. In your answer to the third direct interrogatory, you relate a conversation which you say took place at your house in Dana, in which you proposed to Mr. Stimpson to go and buy out a concern in Westfield, engaged in the leg manufacture.

Do you think that Mr. Stimpson knew about the existence of that concern and its property before you mentioned it to him?

Ans. I rather think he did.

Cross-int. 22. Had he, shortly before that conversation, been up there and examined the property, or had an interview with its owners?

Ans. Not that I know of. I think he had not. I don't know.

Cross-int. 23. De bene esse. What were the separate names under which, as you say, it was agreed that the business at Westfield and the business at Dana should be carried on, if the Westfield property could be bought?

Ans. The names was not agreed upon.

Cross-int. 24. Who proposed at that meeting that there should be separate names?

Ans. I couldn't tell.

Cross-int. 25. Can you repeat any one thing that was said at that meeting upon that point, and who said it?

Ans. It was said that in market it might have a bad effect to consolidate the companies, as some customers had had difficulty with the Dana concern, and would not buy legs there at any rate; and some, also, with the Westfield concern; and some with Warren Hale, when he was in business, years before. I think this was repeated several times by different ones. I should think it was repeated by Mr. Warren Hale, Mr. George T. Johnson, and Mr. Charles N. Stimpson. I don't think it was repeated by anybody else, still it might have been. There was considerable conversation upon that point, but this is all that I can remember.

Cross-int. 26. Was there any formal vote upon the subject?

Ans. I think not.

Cross-int. 27. And do you mean to be understood that the
117 parties present, in terms, agreed that the business should be carried on under different names, at the two places? and if so, please to give the whole of their language, or as much of it as you can, and who said it.

Ans. I mean to be understood that some of the parties, and I think all of them, said that it would be the better way to have the concerns carried on under different names, so that the customers who bought legs should be satisfied and buy legs of just which concern they had rather. There was no formal agreement that I know of in regard to the matter. There was no dissent to the arrangement.

Cross-int. 28. Give the names of each person whom you recollect to have said what you have just repeated, or anything to that effect.

Ans. I should be more sure of Mr. George T. Johnson and Mr. Warren Hale than of any of the others; but think that the others said the same thing, all of them.

Cross-int. 29. In your answer to the tenth direct interrogatory you say that some three or four days after Mr. Stimpson and Mr. Fales went back to Dana, having closed the bargain for the Westfield property, they returned to Westfield again, and also Mr. George T.

Johnson and Mr. Warren Stimpson. Did Mr. Charles and Mr. Warren Stimpson come up together, and separately from Mr. Johnson and Mr. Fales?

Ans. I do not know. I think they all came in the same train.

Cross-int. 30. Why do you think so?

Ans. Because there was but one train came that day, before I saw them.

Cross-int. 31. Which of them came first to the factory?

Ans. Charles N. Stimpson.

Cross-int. 32. Were you and he together some time before the next one came?

Ans. We were together a short time; as nearly as I can recollect, five minutes, when Mr. Fales came.

Cross-int. 33. About what time of day did Mr. Fales come to the factory and join you?

Ans. I should think it was a few minutes before noon.

Cross-int. 34. At what time did they all arrive there in the morning?

Ans. I think the train came in at half-past eleven, but am not positive.

Cross-int. 35. In your answer to the eleventh direct interrogatory, you speak of a conversation with Mr. Allen Goodman, Mr. Charles N. Stimpson being present, in which you said that you wanted the concern to go on in the shape it was first arranged. Did you mean by that, having separate names at the two places, and with the original division of shares, omitting Mr. Lindsay as a partner?

118 Ans. I did.

Cross-int. 36. Did you, or did Mr. Chrrles N. Stimpson in your presence, ever express willingness to go on with the concern under any other arrangement?

Ans. I did myself. I think Mr. Stimpson did.

Cross-int. 37. If Mr. Stimpson did, was any one else present besides yourself and him when he said so?

Ans. I think he told Mr. Goodman so at my house.

Cross-int. 38. What did he say to Mr. Goodman?

Ans. I think he said he would go on if Mr. Lindsay would step out. He said that Mr. Lindsay was his greatest objection to the company.

Cross-int. 39. Did he say what his objection to Mr. Lindsay was? I mean whether it was a personal objection, or whether it was to the introduction of another partner?

Ans. I think both.

Cross-int. 40. Did he say to Mr. Goodman what his objection was to Mr. Lindsay, personally?

Ans. I think he did.

Cross-int. 41. What did he say?

Ans. I think that would be most too personal. I should rather not state that; it was a personal affair.

Cross-int. 42. Was this said to Mr. Goodman at the interview between Mr. Charles N. Stimpson, Mr. Goodman, Mr. Lorenzo Hale,

and yourself, mentioned in your answer to the eleventh direct interrogatory?

Ans. Yes, I think so.

Cross-int. 43. You say that Mr. Stimpson asked Mr. Lorenzo Hale and Mr. Goodman, in that interview, if they were going to take up with your proposal to let him go, and that they replied that they couldn't do anything about it. Do you mean couldn't do anything about it in the absence of their associates?

Ans. They didn't say that.

Cross-int. 44. Did they give any reason why they couldn't do anything about it?

Ans. They did not.

Cross-int. 45. De bene esse. You say that you couldn't learn from Mr. Lindsay where Mr. Warren Hale and Mr. Johnson had gone on the occasion of your and Mr. Stimpson's coming to Dana for this interview. Didn't you learn from Mr. Goodman where they had gone?

Ans. I did not.

Cross-int. 46. Have you stated all that passed in the conversation between you and Messrs. Stimpson, Goodman, and Lindsay, relating to the purpose of your visit, the pending arrangement between the parties, and any proposed or desired changes therein, and the absence of Mr. Johnson and Mr. Hale?

119

Ans. We had considerable conversation. I don't recollect anything more in particular.

(The eleventh answer in chief having been read to the witness, the question was again read to him, and he answered as follows, viz:)

I don't recollect anything further.

Cross-int. 47. At that interview, did you or Mr. Stimpson hold any of the conversation in question with Mr. Goodman and Mr. Lindsay together, or was it all held with Mr. Goodman alone?

Ans. I think we didn't see Mr. Goodman and Mr. Lindsay together. The conversation was not all with Mr. Goodman alone.

Cross-int. 48. What parts of it were with Mr. Goodman (the counsel for the complainant here objecting to the use in evidence of such part of said conversation as may now appear to have been not held with Mr. Goodman) or in his presence?

Ans. I think all that I have stated.

Cross-int. 49. In that conversation was any proposition made by you or Mr. Stimpson to Mr. Allen Goodman that he should take the Westfield purchase off of your hands?

Ans. I think there was not any, that he should take the whole property. Mr. Stimpson, I think, proposed that he should take his share.

Cross-int. 50. What reply did Mr. Goodman make?

Ans. I think he said he couldn't do anything about it.

Cross-int. 51. Do you mean that he used those words; if not, can you give his words?

Ans. I think those were the words he used.

Cross-int. 52. Did he say this, or to this effect: You know I can't take it; I haven't the means?

Ans. I should think not, at that time.

Cross-int. 53. Did he at any time?

Ans. I should rather think that I had heard him make that remark at some time, but I couldn't say when.

(At this point the witness wished to make a correction or explanation in relation to his answer to the forty-ninth interrogatory, and now says that he understood the proposal mentioned in that interrogatory to have been made to Mr. Goodman as a representative of the company bearing the name of Warren Hale & Co., of which he was a member; but the question having been explained to me as referring to a proposal to Mr. Goodman personally, I now answer the question, that I should think there was not any such proposition made; I don't recollect of any.)

120 Cross int. 54. Do you remember Mr. Goodman's saying, Why don't you offer it to Mr. Warren Hale, or words to that effect?

Ans. I think I do.

Cross-int. 55. Who replied, and what did he say?

Ans. Mr. Stimpson, I think. I think he said, because you didn't fetch him up here, according to agreement, and that he couldn't get at him—could'nt find out where he was; and didn't believe but that he cleared out so that he needn't see Mr. Stimpson.

Cross-int. 56. Was this said in the presence of Mr. Lindsay?

Ans. I think not.

Cross-int. 57. Where were Mr. Stimpson, and Mr. Goodman, and yourself when this was said?

Ans. I think we were at my house. There was a very similar conversation at the shop, I think, but I think not in the presence of Mr. Lindsay?

Cross-int. 58. Have you stated all you remember of what Mr. Stimpson said in reply to the suggestion that he should sell out to Mr. Warren Hale.

Ans. I don't recollect anything more. I don't understand that any proposal was made to sell to any individual except as the representative of Warren Hale & Co. That, I understood, was the name of the company.

Cross-int. 59. Referring particularly to what you speak of in your answer to the fifty-seventh cross interrogatory as "a very similar conversation at the shop," have you stated all that you remember of what Mr. Stimpson said in that conversation as to his willingness to sell out to Mr. Warren Hale, whether individually or otherwise?

Ans. I don't recollect anything further.

Cross-int. 60. Did Mr. Stimpson want to sell out in order to get rid of the liabilities and responsibilities of the concern?

Ans. I don't know what he wanted.

Cross-int. 61. What practical difference did it make in the nature of the transaction and the situation of the parties whom Mr. Stimp-

son sold to, so long as he sold to a responsible party whom the other members were willing to accept in his place?

Ans. I don't know that it made any.

Cross int. 62. At the time Mr. Fales sold out his interest in the Westfield purchase, was he reputed to be a man of property?

Ans. He was.

Cross-int. 63. What was the value of the Steinway piano which he received in part payment for his interest?

Ans. I think about three hundred dollars at the wholesale price.

Cross-int. 64. Who went to see Loomis, Lewis & Co., if any-
121 body, to obtain their consent to the substitution of Mr. Warren Stimpson for Mr. Fales?

Ans. I think I went to Mr. Loomis myself.

Cross-int. 65. State what you said to him in explanation of your errand.

Ans. I think I told him that Mr. Fales wanted to get out, and that Mr. Charles N. Stimpson and myself proposed to put in Mr. Warren Stimpson in his place, if he was willing to make the change in the writings. There was some further conversation about the responsibility of Mr. Stimpson.

Cross-int. 66. What did Mr. Loomis say in that conversation?

Ans. He said that it didn't make any difference to him, as long as the parties were responsible; that he didn't know either party, but supposed them to be responsible, both of them. That is the substance of the conversation.

Cross-int. 67. State as precisely as you can when and where this conversation was.

Ans. The conversation was in the fore part of October, 1859, at Mr. Loomis's house.

Cross-int. 68. Was it the same day that you executed to Mr. Fales the note and the piano order, which have been put in with your testimony?

Ans. I think it was.

Cross-int. 69. De bene esse. In your answer to the twenty-second direct interrogatory, you say, speaking of a certain interview at Greenfield, "there was talk about the Wheeler machine; we thought we should want that machine to enable us to do our half of the work." Was that said by anybody to either Mr. Warren Hale or Mr. Goodman, and to which one, and who said it? and give his language as nearly as you can.

Ans. I don't know that it was.

Cross-int. 70. De bene esse. Please state as exactly as you can what was said to and by Mr. Fales upon the subject of his going out of the Westfield purchase, or continuing in it.

Ans. I think Mr. Stimpson asked Mr. Fales what should be done with the property. We had got it in our hands, and had got to do something with it. Mr. Fales said he didn't know what to do with it. He asked him what he proposed to do with it. Mr. Stimpson said he thought we had better let Loomis, Lewis & Co. have it, take t back again. I told them that I would not consent to that. Mr.

Fales wanted to know what I proposed to do. I told him run it, of course. We had some further conversation, and Mr. Stimpson asked Mr. Fales if he wished to stay in and run it. Mr. Fales said he should like to, but that he had family connexions with most of the Dana parties, and that he thought it wouldn't be best. He
122 didn't want them to have any hard feelings towards him. We had some further conversation, which finally resulted in a trade.

Cross-int. 71. What was the further conversation about?

Ans. About the terms on which he would go out.

Cross-int. 72. In your answer to the sixteenth direct interrogatory, you say, "we agreed (Stimpson and myself) that if they could buy the property and pay in pianos, that we would take the machine and let them have all the rest of the property," &c., &c. Did either you or Mr. Stimpson say that to Mr. Warren Hale or Mr. Goodman, and to which one, and who said it?

Ans. I said it myself to them both together, and I think Mr. Stimpson said it also.

Cross-int. 73. Who replied, and what did he reply? Give his words as nearly as you can.

Ans. I think Mr. Hale said that they would buy it if they could, and that they would take the piano and the melodeon, unless they had to pay part cash. If they did, we must keep the melodeon, and pay them a hundred dollars in cash.

Cross-int. 74. Is that all that you remember that he said upon the subject?

Ans. I recollect there was some further conversation, but don't recollect what it was; nothing of any importance.

Cross-int. 75. State all that your firm ever paid in pursuance of that bargain.

Ans. I don't know anything about it—whether they ever paid anything or not.

Direct-interrogatories resumed:

Int. 1. Did Mr. Warren Hale visit the shop at Westfield after it was put in operation? and if so, when was it?

Ans. He did. I think it was in 1856. I should think in January, February, or March—soon after the shop was opened.

Int. 2. State, if you know, whether he saw the leg machine; and if so, what were the circumstances concerning it?

Ans. He did. Mr. Bosworth, one of the proprietors of the shop, came to me, and wished (objected to) me to show Mr. Hale the machine. I did so. I put the machine in operation, and cut out a leg. I believe that answers the question.

Int. 3. If any conversation took place at that time, or while Mr. Hale was at Westfield, between Mr. Hale and Mr. Bosworth or yourself, relating to the machine or to the business, state what it was.

123 Ans. Mr. Bosworth asked Mr. Hale what he thought of the machine. Mr. Hale said he thought it worked very nicely. Mr. Bosworth then asked him if he thought it would be any infringe-

ment upon the Hale and Goodman patent. He said he didn't think it would. Mr. Bosworth asked him if he didn't think he had better take hold with him. Mr. Hale said he should like to himself, but that his family wouldn't leave Philadelphia. Mr. Hale told Mr. Bosworth that he had got a good start, and that he hoped he would put it through; that all that he had got to do to run the Dana folks out of market was to get up good work, and that he hoped he would do it. They had some further conversation about Mr. Hale's taking hold with Mr. Bosworth. I couldn't give the conversation, but it was about the same as I have before stated.

Int. 4. Now will you state whether he said anything about the Messrs. Stimpson, or about the company of Johnson, Stimpson & Company; whether he gave any information to Mr. Bosworth about customers? And if he did, state what it was.

Ans. He said nothing about the company further than I have stated, that I know of. He gave some names of some piano makers in Philadelphia and Baltimore, I think, and also of an agent who was acting as an agent for Johnson, Stimpson & Co.

Int. 5. If he said anything about being glad that they had got a machine which was not covered by the Hale and Goodman patent, or anything to that effect, state what it was.

(Objected to as leading.)

Ans. He said that he had got a machine which those fellows at Dana couldn't interfere with, and that he was glad of it. He said they had been pretty important, and that he would be glad to see them run out of the market.

Int. 6. To whom was this said, and to whom did he refer in saying that he had got a machine?

(Objected to.)

Ans. It was said to Mr. Bosworth, and he referred to Mr. Bosworth. He was talking with him. The language used was, I am glad that you have got a machine that they can't interfere with.

Int. 7. State if you know how Mr. Hale came to make that visit to Westfield?

Ans. I understood (objected to) that he came there to see Mr. Bosworth in regard to going into company with him.

Int. 8. From whom did you get this understanding?

(Objected to.)

Ans. From Mr. Bosworth, and from conversation which I heard between the two.

124 Int. 9. Can you state what that conversation was?

Ans. I couldn't, any further than the conversation I have already stated.

Int. 10. If the understanding that you got from Mr. Bosworth was derived from anything that Mr. Bosworth said in Mr. Hale's presence, state if you can, what it was.

Ans. Mr. Bosworth asked him what he had concluded to do about coming there. He said he thought he couldn't come on account of his family. Mr. Bosworth said to him that he could let his family stay

where they were, and that he could do the travelling for the concern. Mr. Hale said he would think it over and let him know.

Int. 11. If you recollect any further conversation between them, state what it was.

Ans. I don't recollect any, not now.

Cross-interrogatories resumed:

Cross-int. 1. Did Mr. Hale say anything about what the Hale and Goodman patent covered?

Ans. I think not—don't recollect of anything.

Direct-interrogatories resumed:

Int. 1. Was the machine, at that time, the same as it now is, or was at the last time that you saw it; and the same as the model to which you have referred, with the exceptions which you pointed out?

Ans. It was precisely.

WM. N. OAKS.

Deposition of Albert Bosworth.

Int. 1. What is you name, age, residence, and occupation?

Ans. My name is Albert Bosworth; I am fifty-three years of age; I am keeping a hotel at Hermon, St. Lawrence county, New York.

Int. 2. Where did you reside in 1855, and for three or four years following that?

Ans. In Westfield, Massachusetts.

Int. 3. Have you ever been engaged in the business of manufacturing pianoforte legs? and if so, when, and where?

Ans. I have, from 1856 to the year 1858, in Westfield.

125 Int. 4. State how you first came to engage in the business, and with whom, if any one, you first made arrangements to do so.

Ans. I once resided in Dana and married there. I was there on a visit from Westfield, and I saw Mr. Hammond Doane. He had sold out. I asked him (objected to) what he was going to do, and he said he would tell me confidentially; he thought he should find a good location, and start the leg business. I asked him to come to Westfield, and told him I thought that would be a good location. He came and looked matters over, and then came again the second time, and made a proposition to me to go in with him, and we formed a partnership, and purchased a shop, contracted for lumber, an engine, and boiler. But before we commenced manufacturing Mr. Doane died.

Int. 5. Before Mr. Doane's death, what machine did you design to use for planing legs.

(Objected to.)

Ans. I couldn't tell you myself. Mr. Doane said that he had got a plan in his head, that he could get up a machine that would be no infringement, and a better machine too, and as I depended wholly upon him, I didn't bother my head about the machine.

Int. 6. What did you do after Mr. Doane's death, in reference to going on in the business?

Ans. I tried to get some one to purchase his widow's share, and to go on with me. I applied to a number before I succeeded. I went to Dana and applied to Mr. Lyman Wheeler. Didn't succeed in making an arrangement with him I think I spoke to Mr. Allen Goodman about it, and I some think I did to Lorenzo Hale, but I won't be positive. I think I said something to the leg company there to see if they wouldn't buy the whole thing out or to go in with me. I preferred to sell it out, as I didn't understand the business. Finally I succeeded in getting Mr. T. H. Loomis, of Westfield, to buy the widow's share, and then we formed a copartnership to manufacture legs. This partnership was formed August 5, 1855.

Int. 7. Will you state what conversation you had with Mr. Allen Goodman in respect to going to Westfield? and if he said anything in regard to building a machine for planing legs, state what it was.

Ans. I think I had some conversation with him twice on the subject. I think I asked him if he wouldn't sell out at Dana, and go to Westfield with me. He didn't incline to go. I talked with him something about a leg machine, and he said he had got a plan in his head, or he could build a better machine than they had got, he thought. I think I asked him if he could build one and not have it any infringement on the machine they had, as he had built that, and he said he could, one that would be a better machine. He then asked me, if I remember right, what kind of a machine Mr. Doane was going
126 to get up. I told him I didn't know, as I had never seen any model, and didn't know as he had made one. Mr. Goodman didn't tell me what kind of a machine he could get up.

Int. 8. State whether he was or not at that time a member of the firm of Johnson, Stimpson & Co.

Ans. I think he was.

Int. 9. After you formed your copartnership with Mr. Loomis, did you make any arrangement with Mr. William N. Oakes to go to Westfield and start a shop and build a machine for planing legs?

Ans. I did.

Int. 10. State whether at the time you hired Mr. Oaks, or previously, you had any conversation with Mr. Goodman in respect to hiring Mr. Oakes, and in respect to his ability to start the shop and build a leg machine capable of doing your work.

Ans. I had some talk with Mr. Goodman about the time I was thinking about hiring him in relation to hiring him. I was not acquainted with Mr. Oaks then. I asked him if he thought he would answer my turn, and he said, if I remember right, that he thought he would. He said he was a good mechanic, and would fill that place as well as any one whom he thought I could get, or words to that effect. Then I asked him if he thought Oaks could build a leg machine. He told me he thought he could; that he and Oaks had talked some together about machines. I told him I wanted to get up a good machine, that there wouldn't be any trouble about; that I wanted to evade any difficulty with their patent.

Int. 11. State whether or not Mr. Goodman said anything in reply

to what you said about avoiding trouble with your machine, and about evading any difficulty with their patent; and if so, what it was.

Ans. I asked him if Mr. Oaks could get up a machine that would avoid their patent, and I understood him to say that he could; that he (Goodman) could do it himself. He told me this, both then and before. Mr. Goodman said he had talked with Mr. Oaks, and I supposed that they understood each other's minds about it. I was very particular. If I could hire Mr. Oaks to get up a machine that wouldn't infringe, I wanted to hire him, but I told Mr. Goodman that if he couldn't do it, he wasn't the man I wanted. The reply he made was that he thought he would do as well as anybody that I could get; that he was a good mechanic—as good a man as I could get outside of the company.

Int. 12. At what time did you commence manufacturing legs?

Ans. About the first of January, 1856, that we got to making legs to sell much. We made some samples and some patterns before.

127 Int. 13 After you commenced manufacturing, did Mr. Goodman visit your shop in Westfield? If so, how often, and how long was he there, and when was it?

(Objected to as immaterial.)

Ans. I saw him there once in 1856; I can't tell what month; he stopped with Mr. Oaks over night.

Int. 14. Did he then, or at any time afterwards, make any complaint as to the machine you had in use being an infringement of their patent.

(Objected to as immaterial.)

Ans. Not to my knowledge.

Int. 15. After you commenced manufacturing, did you have any communications with Mr. Warren Hale with reference to coming to Westfield and engaging in business with you? If so, state when and where you first saw him upon the subject, and what passed between you at that time.

(Objected to as irrelevant and immaterial.)

Ans. In the year 1856 Mr. Hale resided in Philadelphia, and I used to call on him at various times; I was acquainted with him, and showed him my work; he appeared to be much pleased that I had succeeded in getting up so good work. Some time in the fore part of 1856, in the spring, I saw Mr. Hale in Philadelphia, and knowing that he had been in the business and had experience in it, I asked him to come to Westfield and buy out my partner; it struck him quite favorably, as I thought. The next time I was at Philadelphia, I had talk with him on the same subject; he said he was going to Dana some time that year, and he would come by the way of Westfield and see me, and he did so.

Int. 16. When did he come to Westfield? State what passed between you while he was there.

(Objected to as immaterial.)

Ans. It was, I think, in September, 1856; I was not at home when he first came, but I came back before he left; I think he staid over night, but won't be positive about it; I asked him if he had been

down to my factory; he said he had; I asked him if he had been over the village; he said he had; I asked him to go down to the factory with me, and he went; I took him round the factory, and showed him all the works I had, and then I called on some one, I think it was Mr. Oaks, to put a leg into the machine and cut it, to let him see the operation of it; he did so, and after the leg was cut, I asked Mr. Hale how he liked the machine and work; he said he liked them very well; that the work was done very well, and it was a very good machine. I asked him if he didn't think that my machine was better than the Dana machine, and would work better; he thought
128 it was a better machine. Then I asked him in regard to the patent; if he didn't think I had got a machine that wouldn't infringe at all on their patent; he said he thought it wouldn't; he was glad of it; he was glad to see me doing so good work, and succeeding over the Dana company. Then I asked him what he thought about buying Mr. Loomis out, if he could buy him out right, and going in with me; he assigned as a reason for not buying, that his wife was so attached to Philadelphia that he didn't want to move away from there; he liked Westfield very much himself. I think this was about the end of the conversation; I don't remember anything else.

Int. 17. State whether or not he ever gave you any assistance in procuring business, either by introducing you to parties who purchased legs, or by procuring parties to send orders to you, or by recommendations of you and your work, or in any other way; and if so, state what he did and when.

(Objected to as leading and immaterial.)

Ans. He went out once with me in Philadelphia, and introduced me to two or three piano manufacturers; that is all he ever did to my knowledge; this was in the fore part of 1856. I probably asked him to give me the names of the manufacturers, and he went out with me.

Int. 18. When did your connexion with the company of Bosworth & Loomis terminate?

Ans. On the 10th of August, 1858, I sold out to Mr. Loomis.

Int. 19. Up to the time when your connexion with the company terminated, had any complaint been made to you by the Dana company, or by any member of it, as to your machine being an infringement of their patent?

(Objected to as immaterial.)

Ans. Not to my knowledge; nothing was said to me about it, and I frequently saw some of them; I saw Mr. Stimpson the most; he was my competitor, and saw Mr. Johnson once or twice.

A. BOSWORTH.

Deposition of William Stimpson.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is William Stimpson; I am sixty-four years of age; I reside in North Dana; I am a farmer; have been engaged in manufacturing for the last two years.

Int. 2. Have you been at any time a member of the company at Dana, engaged in manufacturing pianoforte legs? If so, will you state during what years, and what was the name of the company during such years.

129 Ans. I have been a member of the company; I havn't the means now of telling given dates, but I commenced somewhere near 1850, it may be 1851; and think I continued in the firms for six or eight years from that time. At first, the name of the firm was Stimpson & Doane, and afterwards Johnson & Stimpson.

Int. 3. While you were in that firm did you carry on a suit in New York against Alanson E. Brooks, in the name of Warren Hale as plaintiff, for an infringement of the Hale and Goodman patent?

Ans. We did.

Int. 4. State whether you saw the machine which Mr. Brooks was using; and if so, state how far it was like or unlike the Hale and Goodman machine.

Ans. I did see the machine; it was like the Hale & Goodman machine, with the exception of raising and falling the cutters; in the Hale & Goodman machine they were raised by a rack and pinion, and in the Brooks machine by a lever.

Int. 5. What was the result of that suit?

(Objected to.)

Ans. We sustained the patent.

Int. 6. State whether or not your company commenced a suit, in equity, against the said Brooks for using a different machine; and if so, in what respect such machine differed from the machine that he previously used, and from the Hale & Goodman machine.

Ans. The firm of Johnson & Stimpson commenced such a suit against Brooks. This machine, which was the subject of the equity suit, had the cutters perpendicular, and the frame that the block was fastened into swung on a hinge, as near as I can recollect, up to the cutter, to give it the form. In both of the other machines the cutters were horizontal, and the wheels of the carriage ran on patterns to give form to the work. I can't remember to describe any further difference.

Int. 7. State whether or not, at the trial, the said Brooks introduced a model of the machine used at the Springfield armory for making gun-stocks, and offered evidence to show that such machines were in use before the date of the Hale & Goodman invention; and if so, state in what respect such machine differed from the machine said Brooks was then using, and for the use of which you were prosecuting said suit.

Ans. He produced such a model and offered such evidence. I am not a mechanic, and couldn't tell the difference between the two machines.

Int. 8. State, if you can, whether the cutters in such model were vertical or horizontal, and whether the work was held in a

130 frame and moved up to the cutters, in a manner similar to that which you have described in respect to the Brooks machine.

Ans. I can't remember.

Int. 9. What was the result of that suit?

(Objected to.)

Ans. After sitting two half days and watching it, I became satisfied that we were beat. As I was going from the office with Mr. Gifford, our counsel, he says to me, "Stimpson, what do you think of this case?" I said, "I think we are beat;" and he said, "So do I." I went to my lodging and had some conversation with my son Charles; told him we were beaten; he appeared very much disappointed. The next morning I was on Broadway, and I met Mr. Brooks. I said to him, "You feel pretty well, don't you, this morning, Mr. Brooks?" He said, "About as usual; why?" I said, "I conclude from the appearance and from what the judge says, that we are beat, and I am always willing to own it when fairly beat, and to go in for a compromise." And Brooks said, "What is it?" I said, "If you will acknowledge, before the public, that the patent is sustained, we will give you leave to run through all time; this will be as much for your interest as for ours, and will keep others out of the business." He stopped a minute and said, "I will do it." He did do it, and we gave him a lease to run the machine undisturbed.

Int. 10. Was any agreement made as to costs? And if so, what was it?

Ans. Each one to pay their own.

Int. 11. Did you know of the purchase in 1859 of the Westfield property now owned by your sons, and of the propositions which were then made for forming a company, of which your sons, Mr. Warren Hale, and Allen Goodman and others were to be partners, for carrying on business and making pianaforte legs both at Dana and Westfield?

Ans. I did, by overhearing the conversation of the parties.

Int. 12. Did you, about that time, or while the negotiations were pending, have any conversation with Mr. Warren Hale in relation to the purchase or to the formation of the company? If so, state when and where it occurred, and what it was.

Ans. That company was not organized; there was trouble amongst them while trying to organize. My sons came to the conclusion that they would not go in on account of taking in more members than was first agreed upon, as I understood it. I heard that Mr. Hale accused me of breaking up the negotiation. I went to see Mr. Hale and told him what I heard, and he said, "You did do it—you was the means of it." I told him I didn't want to have any hard feelings between us; I wanted that we should be friendly to each other as we both lived in a little village together. He said a
131 good many hard things. I told him, you can have the property; there are enough of you without my two sons. He said, "I don't want the property." I think I said there are seven of you, the company will be big enough without them. This conversation was in Mr. Hale's door yard, and occurred while these negotiations were going on.

Int. 13. What property did you refer to?

Ans. The Westfield property.

Cross-interrogatories by Causten Brown, esq.:

Cross-int. 1. At the time of your conversation with Mr. Hale were your sons absent at Westfield, or on their way to Westfield?

Ans. I cannot tell.

Cross-int. 2. Do you remember having said to Mr. Hale on that occasion anything about his sending Johnson and Lindsay up there after your sons, dogging them round, or some such thing?

Ans. I might have said so, and I might not; we had strong words.

Cross-int. 3. Are you on speaking terms with Mr. Warren Hale at present?

Ans. We are not sociable.

Cross-int. 4. Please answer my question.

Ans. I have no objection to speaking to him.

Cross-int. 5. Do you speak to him when you meet him?

Ans. We don't practice it.

Cross-int. 6. How long is it since you ceased to recognize and treat Mr. Hale as an acquaintance?

Ans. Ever since he dodged round the other side of a load of hay to get rid of speaking to me.

Cross-int. 7. Please to answer my question without malice or evasion. How long is it—how many years?

Ans. I don't remember. I should think that it was about the time that this conversation took place in his door yard.

Direct interrogatories resumed:

Int. 1. Which of you first refused to recognize or speak to the other.

Ans. I should have spoke to him when I met him, but he went the other side of the load of hay.

WM. STIMPSON.

132 *Deposition of Warren Stimpson.*

Int. 1. What is your name. age, residence, and occupation?

Ans. My name is Warren Stimpson; am thirty-eight years old. I reside in Westfield, Mass., and am a pianoforte leg manufacturer.

Int. 2. Are you one of the respondents in the suit in equity between Warren Hale *et al.* and Charles N. Stimpson *et al.*?

Ans. I am.

Int. 3. Were you a member of the firm of Johnson, Stimpson & Co., at the time that company sold out its business, in Dana, to Warren Hale, in 1859?

Ans. I was.

Int. 4. Who were the other members of the firm at that time?

Ans. George T. Johnson, Charles N. Stimpson, Allen Goodman, and Flint Peckham.

Int. 5. State at what periods Mr. Allen Goodman had been a member of that firm.

Ans. He was a member from some time in the spring of, I think, 1854, to some time in 1857. Then he was out of the firm, for I cannot tell how long a time. And he then bought my father's interest, he and Mr. Peckham together, which he held till Johnson, Stimpson & Co. sold out to Mr. Hale.

Int. 6. What part had you been accustomed to take in the business of that concern, and what part had you taken in the concern of Stimpson & Co., at Westfield?

Ans. I had charge of the mechanical part of the business in both places.

Int. 7. Were you in the habit of working upon the machines for planing legs, at both places?

Ans. I was.

Int. 8. Describe the method of operating the Hale and Goodman machines at Dana; that is, state what the workman has to do in the process of planing legs, and also give the same explanation as to the Oaks machine at Westfield.

Ans. The Hale and Goodman machine has two motions, which are difficult for a new beginner to get the hang of. The workman has to raise and fall the cutter from and to the work, with his left hand, while with his right hand he has to carry it through the machine by turning a crank. He raises the cutter also by turning a crank. In the Oaks machine the work is run through in the same way, without the left hand motion.

Int. 9. In the Hale and Goodman machines, does the pattern raise and lower the cutters, as the carriage is moved forward, or is it capable of doing so?

Ans. It does not, and cannot.

133 Int. 10. What is the relative degree of skill and experience required in an operator of the two machines?

Ans. It requires considerable skill to tend the Dana machine, about one half more than it does the other. A raw hand on the Oaks machine will run it right off. On the Hale and Goodman machine it takes considerable of a mechanic, and it will take him some time—six or eight months—to be able to operate it any ways decently.

Int. 11. After you sold out in 1859 what arrangements, if any, did you make about going into other business?

(Objected to.)

Ans. I looked to see if I could find an opening in a machine shop, in several places. I made no arrangements. I decided to go into the machine business.

Int. 12. Who first spoke to you about the purchase of the Westfield property? When was it, and what was said between you at the time?

Ans. Mr. Charles N. Stimpson first spoke to me. (Evidence of conversation objected to.) It was after we had sold to Johnson, Stimpson & Co. It was within three days of the time when the Westfield property was purchased. He asked me if I would take a share, provided the Westfield property could be bought. I told him I wanted to go into the machine business, and didn't know as I cared to go into

the leg business again. I believe that was all that was said at that time.

Int. 13. Who spoke to you next upon the subject?

Ans. I think Mr. Warren Hale.

Int. 14. How long after the conversation with your brother was this?

Ans. Not more than two days.

Int. 15. Where was it?

Ans. It was up at my house in Dana.

Int. 16. What passed between you at that time?

Ans. He asked me if I wanted to take an interest in the leg business, provided the Westfield property could be bought. I told him I had made up my mind to go into the machine business. That is pretty much all that transpired at that time.

Int. 17. Who next spoke to you upon the subject?

Ans. I think Warren Hale and Charles N. Stimpson came together.

Int. 18. Where did this conversation take place, and how long was it after the previous one?

Ans. It took place in front of the shop in Dana. I think it was the next day after Mr. Hale spoke with me.

Int. 19. What passed between you at that time?

134 Ans. They wanted to know if I wouldn't take an interest any way. I think I asked them how many shares there were going to be, or how many partners. They said seven partners. There would be seven partners if I took an interest in it. I told them I didn't care if I did at that time. They said that Mr. Oaks and Mr. Fales and Mr. Charles N. Stimpson were going to Westfield to see if they could buy that concern. I think that is pretty much all that was said at that time.

Int. 20. Did they state who the partners were to be?

Ans. I think they did.

Int. 21. Who were they?

Ans. Warren Hale, Allen Goodman, Lorenzo Hale, Charles N. Stimpson, George T. Johnson, myself, Warren Stimpson, Joseph Fales, and William N. Oaks.

Int. 22. Was anything said about the share which each was to have?

Ans. I don't remember that there was.

Int. 23. Was anything said about the manner in which the business was to be carried on, or the name or names under which it was to be carried on?

Ans. I think there was. There should be two names, one for the Westfield concern and one for the Dana concern. Mr. Oaks and Mr. Charles N. Stimpson and Mr. Fales were talked of to carry on the Westfield concern. The rest of the members were to carry on the Dana concern.

Int. 24. Were you present at any meetings in the office of Warren Hale & Co. between the proposed partners, previous to the purchase of the Westfield property?

Ans. I was not.

Int. 25. Did you know when Charles N. Stimpson, Mr. Fales, and Mr. Oaks went to Westfield?

Ans. I knew that they had gone. They said they had gone to purchase the property.

Int. 26. After the return of your brother and Mr. Fales, did you attend a meeting of the persons you have named, or any of them? and if so, state where it was, and how long after their return.

Ans. I met them at Athol; I think the next day after their return; I think it was on Saturday.

Int. 27. What took place at that meeting, (objected to, it not appearing that either of the complainants were present,) and who was there?

Ans. Mr. Warren Hale was there, (objection withdrawn,) Lorenzo Hale, Charles N. Stimpson, Joseph Fales, and myself. These are all I think of now. Mr. Hale said he thought we had better not have but one name for both places of business. Some others—I
135 don't remember who—objected to it, but would rather go along as first talked of, that is, to have two names for the two places. I don't remember of anything else. I think that we didn't come to any conclusion. There were no new partners introduced at that time, and nothing was said in my hearing about new partners.

Int. 28. Did you attend another meeting afterwards of the partners? and if so, when and where was it, and who was present?

Ans. I did, on the Monday following, at the office of Warren Hale & Co. Mr. Warren Hale, Allen Goodman, George T. Johnson, Charles N. Stimpson, Joseph Fales, Lorenzo Hale, myself, and Silas F. Lindsay, were present.

Int. 29. If anything was said then as to the names under which the business was to be carried on, or as to the introduction of new partners into the concern, state what it was.

Ans. Mr. Johnson proposed to take Mr. Lindsay as a new partner, in addition to the rest; Mr. Lindsay proposd having but one name for the two concerns, that name to be Johnson, Hale & Co. They took a vote and voted that that should be the name.

Int. 30. Was any objection made by any one, to having but one name? and if so, by whom?

Ans. I think Mr. Charles N. Stimpson objected to it, and Joseph Fales and myself.

Int. 31. When the vote was taken, did any person vote against the proposition?

Ans. I think they did, Mr. Fales, myself, and Mr. Charles N. Stimpson.

Int. 32. Was any objection made to the introduction of Mr. Lindsay as a member of the company? and if so, by whom?

Ans. There was, by myself and Charles N. Stimpson.

Int. 33. For what reasons did you object, as stated at the time?

Ans. We thought there were enough already.

Int. 34. Had you any other reason for objecting to him, which you did not state at the meeting?

(Objected to.)

Ans. I had.

Int. 35. At that meeting, or at any time immediately thereafter, did Charles N. Stimpson propose or offer to give up his interest in the Westfield property? If so, state what he said and to whom, and where and when it was said.

Ans. He did. To Joseph Fales and George T. Johnson. (Evidence of what was said objected to.) It was in the vicinity of Charles N. Stimpson's house, in the afternoon after they met in the office. Charles N. Stimpson told them that if they would pay what expense he had been to in purchasing the Westfield property, he
136 would give up his interest in the property, providing they would satify Oaks. They said they would talk with the rest of the members, and let him know about it before night. Mr. Fales and my brother came to me soon after, and wanted me to go to (objected to) Westfield the next morning, in case they could not make arrangements with Mr. Oaks, to release my brother, to take Mr. Fales's place in the trade. I told them I would go; Mr. Fales to meet us at Greenwich village the next morning.

Int. 36. State whether you did go, in pursuance of that arrangement, and who went with you.

Ans. I did go, with my brother and Mr. Fales, and Mr. George T. Johnson, and Silas F. Lindsay.

Int. 37. How did you go, and when did you arrive there?

Ans. Went on the cars from Belchertown to Westfield, and arrived between eleven and twelve.

Int. 38. Were you present at any interviews between the parties who went with you and Mr. Oaks, at Westfield?

Ans. I think not.

Int. 39. Did any of the parties return to Dana? If so, state who they were, and what object, if any, they gave for going.

(Objected to.)

Ans. They did. William N. Oaks, Charles N. Stimpson. I staid there myself and took charge of the shop. I think Mr. Fales went home to Troy. They said they were going to dispose of the property at Westfield, to Warren Hale & Co.

Int. 40. At the interview between your brother and the parties you have mentioned, after the meeting at the office, did your brother say anything to them about getting Loomis, Lewis & Co. to take the Westfield property back? If so, state what it was.

Ans. I think he did. He would see if they would take the property back.

Int. 41. Did you, at either of those interviews before you went to Westfield, propose to retire from the company, and give up your share? If so, state when it was, and to whom you made your proposal.

(Objected to.)

Ans. I did. After we left the office, I made the proposal to Allen Goodman and my brother to step out of the concern.

Int. 42. What was said in reply to that?

Ans. I think Mr. Goodman told me I had better not; I don't remember any other reply.

Int. 43. After the visit you have spoken of at Westfield, and after the return of your brother and Mr. Oaks, did Mr. Fales pro-
137 pose to give up his interest in the Westfield property? and if so, state what reason, if any, he assigned for doing it, and whether you took his place in completing the purchase.

(Objected to.)

Ans. He did. He said it would be unpleasant to carry on the business in competition with his brothers-in-law, and therefore he would sell out his interest. I took his place.

Cross-interrogatories:

Cross-int. 1. Do you know whether any member of the firm of Johnson, Stimpson & Co. consulted any counsel, prior to their selling out to Warren Hale, in 1859, as to what rights they would have under the extension of the Hale & Goodman patent, if such should be granted?

Ans. I do not.

Cross-int. 2. Have you been a member of the firm of Stimpson, Oaks & Co., or its successors, ever since that firm was formed?

Ans. I have.

Cross-int. 3. How many days elapsed from the time that Mr. Fales retired from the purchase of the Westfield property and you took his place, until the time that the firm of Stimpson, Oaks & Co. was formed or agreed upon?

Ans. I don't know as I could tell exactly. I don't know how many days.

Cross-int. 4. Was it as much as a week?

Ans. I should think it was not far from a week.

Cross-int. 5. Do you mean not far from a week before the company was formed and commenced its arrangements for doing business?

Ans. I do.

Cross-int. 6. State as nearly as you can, how many legs for pianos or similar articles your firm turned out daily, upon an average, from the 7th day of March, 1860, to the 7th day of March, 1862.

Ans. I don't know as I can tell very near, how many they did.

Cross-int. 7. Could you tell upon an examination of the company's books during those two years?

Ans. I think it is very likely I could, although I don't keep the books myself. My brothers, Charles N. and Horace, keep the books.

Cross-int. 8. Please give your best recollection, from the number of legs for pianos and similar articles manufactured by your firm within those two years.

Ans. It might have been five set a day, or more, I couldn't say. I mean four legs to a set.

138 Cross-int. 9. How many sets in a day of ten hours will the machine your firm was using during those two years turn out, with a handy workman at steady work?

Ans. Twenty or twenty-five sets.

Cross-int. 10. What wages was paid to such a man during those two years, and what wages have been paid since?

Ans. We paid ten cents a set; for the last year and a half we have had to pay more, I think thirteen cents.

Cross-int. 11. How many sets could a handy workman, at steady work, turn out daily, by hand?

Ans. I don't know.

Cross-int. 12. Give us your best judgment.

Ans. My judgment isn't good. I never had any experience in that way of getting them out.

Cross-int. 13. During the two years from the 7th of March, 1860, to the 7th of March, 1862, did your firm turn out, upon an average, as many as ten sets of legs daily?

Ans. I couldn't tell whether they did or not.

Cross-int. 14. After the meeting of the proposed partners, at the office of Warren Hale & Co., on the Monday morning after the purchase of the Westfield property, you say a vote was taken upon the proposition of running two concerns under one name, and that certain individuals voted against it. Will you state particularly all that you remember as to the manner in which that vote was taken?

Ans. It was voted by ballot.

Cross-int. 15. Who collected the ballots?

Ans. I don't remember now who it was.

Cross-int. 16. Was there a chairman of the meeting? and if so, who was he?

Ans. I don't remember that there was any.

Cross-int. 17. Was any record made of the proceedings of the company?

Ans. I don't know.

Cross-int. 18. You say that at that meeting there were objections made to the introduction of Mr. Lindsay as a member of the company, objections made by yourself and Mr. Charles N. Stimpson. Will you state any particular thing which you or he said openly in the meeting, in the hearing of those present?

Ans. I think that Charles N. Stimpson said that there were members enough without him, he thought.

Cross-int. 19. Is that all that you can remember as having been said by himself or yourself, upon that subject at that meeting—I mean said openly, in the hearing of those present?

139 Ans. I don't remember that he said anything more, or that I said anything.

Cross-int. 20. Will you state any particular thing which Mr. Charles N. Stimpson, or Mr. Fales, or yourself said openly, at that meeting, in the hearing of those present, against the proposition to have the business at Westfield and the business at Dana carried on under one name?

Ans. I don't know that I can.

Cross-int. 21. How many machines for cutting legs for pianos and similar articles does your firm now have in use or for use?

Ans. Two.

Cross-int. 22. One of them is the Westfield machine, purchased from Loomis, Lewis & Co.?

Ans. Yes.

Cross-int. 23. Is the other one like the model now shown you, identified by a × on the top of the frame and on the top of the carriage, and with a label annexed marked Stimpson No. 2, H. F. S.?

Ans. It is not like it.

Cross-int. 24. In what respects does it differ from it?

Ans. I don't know but the principle is the same. There is no roller in the standard on the bench, for the pattern to run against, in the second machine at Westfield. In that machine it runs against a stationary half-circle facing it. I don't know that there is any other difference.

Cross-int. 25. How long has your firm had this second machine—the one like the model just referred to?

Ans. I believe it was put into the shop sometime last July.

Cross-int. 26. Who built it?

Ans. I think it was built by Lyman Wheeler.

Cross-int. 27. Was it built, under contract, for your firm?

Ans. No, sir.

Cross-int. 28. Do you mean that Mr. Wheeler happened to have it on hand?

Ans. He built it for George Stephens, of Westfield.

Cross-int. 29. How much has this machine been used in your shop since it was put in there?

Ans. I couldn't tell. I haven't been there all the time myself.

Cross-int. 30. State how much it has been used in proportion to the other machine there, so far as you have observed the two.

Ans. It may have been used half the time, three days in a week.

Cross-int. 31. Does the workman with the Hale & Goodman machine have to raise and fall the cutter from and to the work, whether the curve which is passing the knives at the time is steep or gradual?

140 Ans. He does.

Cross-int. 32. Does he cut the leg correctly by keeping the tracer roll in contact with the edge of the pattern?

Ans. He does.

Cross-int. 33. Has the second Stimpson machine been altered in any respect, since it came into your shop?

Ans. Yes.

Cross-int. 34. In what respect?

Ans. When it first came in there was no top box on the cylinder. I put one on myself; got it made at the machine-shop. The upper journal of the cylinder had no bearing. That is all the alteration that was made.

Cross-int. 35. Was it in running order when it came into the shop?

Ans. It was.

Cross-int. 36. What parts, if any, were then, at that time, above the upper journal of the cylinder.

Ans. Just the same as there is now.

Cross-int. 37. Please explain then what the top box on the cylinder is, which you added?

Ans. The parts above the upper journal of the cylinder did not extend low enough to make a bearing in the machine as it first came into the shop. I put in a box to make that bearing.

Direct interrogatories resumed:

Int. 1. Does your firm now own the machines in your shop at Westfield to which you have referred?

Ans. No, sir.

Int. 2. Does the ten cents which you formerly paid for planing legs, and the thirteen cents which you have recently paid, pay for anything besides the mere planing of the leg, or is there other work done?

Ans. This price pays for the planing only.

Cross-interrogatories resumed:

Cross-int. 1. Who does own the machines at Westfield to which you have referred?

Ans. George W. Stevens.

141 Cross-int. 2. Did your firm sell them to him?

Ans. They did, one of them.

Cross-int. 3. Which one?

Ans. The Oaks machine.

Cross-int. 4. When did they sell him that?

Ans. I couldn't tell certainly when it was. I should think it was a year ago, certain.

Cross-int. 5. What price did they get for it?

Ans. I think it was about a hundred dollars.

Cross-int. 6. Does it remain upon your premises?

Ans. It has been there in the shop ever since.

Cross-int. 7. Where it always was?

Ans. Yes, sir.

Cross-int. 8. Does Stevens plane legs on it for anybody else?

Ans. Not that I know of.

Cross-int. 9. Now how about the other machine which I understand you was not sold to Mr. Stevens, and does not belong to your firm; who does it belong to?

Ans. To Mr. Stevens, I suppose. We never bought it from him.

Cross-int. 10. Does that stand in your shop where it has always stood since July?

Ans. Yes, sir.

Cross-int. 11. Does Mr. Stevens plane legs upon it for any other concern than yours?

Ans. I don't know that he does?

WARREN STIMPSON.

Deposition of Charles N. Stimpson.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Charles N. Stimpson; am thirty-six years old; I reside in Westfield; am a pianoforte leg manufacturer.

Int. 2. State when and how you first became interested in the manufacture of pianoforte legs, and in the Hale and Goodman patent for a machine for planing legs?

Ans. I think it was in 1851 I commenced. I bought my interest in the piano business, and in the patent of Mr. Warren Hale.

142 Int. 3. Was any person interested with you in this purchase of Mr. Hale? and if so who, and by whom, and under what name, was the business carried on for the next three or four years after your purchase?

Ans. My brother Warren bought with me one undivided half of Mr. Hale's property and right, in connexion with Mr. Allen Goodman and Mr. Hammond Doane, who bought the other undivided half. Some time after that, I don't remember just how long, Mr. Goodman sold out his interest to Mr. Doane. Then we put our business together, and did business under the name of Stimpson and Doane. Before this we had done a separate business, one firm under the name of W. and C. N. Stimpson, and the name of their firm I do not recollect.

Int. 4. What price did you pay for the property which you purchased of Mr. Hale?

Ans. The whole bill I think was fifty-five hundred dollars for the shops, patent right, and stock. This was for one undivided half of the whole property. I think Goodman and Doane paid the same price for the other half.

Int. 5. State whether any price was fixed upon as the price of the patent, or whether any representations were made by Mr. Hale as to its value, or as to the proportion which it bore to the whole property; and if anything was said in regard to its value, why it was considered valuable.

Ans. I think there was no price fixed upon it separately from the price of the whole property. I don't know that he fixed any price upon it, but he considered it valuable because it gave him the exclusive control of the business.

Int. 6. Did you know at the time you made the purchase, or have any reason to believe, that any other parties were engaged in the manufacture of legs, or were using a machine like yours for planing them?

Ans. I did not.

Int. 7. After you made your purchase, did you learn that any other party was engaged in the business and using such a machine? If so, state who it was, how you came to a knowledge of the fact; and if the matter was the subject of any conversation or negotiation between you and Mr. Hale, state what it was.

Ans. I did. I heard afterwards that Alanson E. Brooks, of New York, was using such a machine. When we bought Mr. Hale out he was to take his pay in piano legs—I think twenty-five sets a week from us, and the same number from Goodman and Doane, and more if he could sell them. These legs were unveneered, and he was to credit us therefor on our purchase at the price of four dollars per set.

He didn't take the legs away so fast as he had done, and they accumulated on our hands. We tried to have him take them
143 away faster, and asked him his reason for his not doing so, and he didn't give us any answer for some time. Finally he told us that Mr. Brooks, of New York, was in the business in competition, and that he took the trade. We told him we thought we had the exclusive right to the business, and supposed we bought it of him. I think it was after frequent complaints of this kind that he consented to commence a suit against Mr. Brooks, to see if he couldn't stop him. He was to bear one-fifth of the expense of carrying on the suit. We made an agreement with Mr. Hale, that is, Mr. Goodman, Mr. Doane, myself and brother, to that effect. The suit was brought in his name, because he held the patent, and also the legal title to the property, we holding only a bond for a deed. He commenced the suit according to this agreement.

Int. 8. State whether or not you made any complaints to him on account of his not informing you that Brooks was engaged in the business before you made the purchase, and state why he consented to pay one-fifth of the cost of prosecuting him.

(Objected to.)

Ans. We did; we thought at the time amongst ourselves it was because he had deceived us in not telling us that there were other parties in the business; we urged it because we were disappointed in not having the exclusive business as we expected. He agreed thereupon to pay one-fifth of the expense; I don't know his reasons any further.

Int. 9. State whether he advanced any money to commence the suit, and received any security for such advances, and whether any other arrangement was afterwards made in reference to the conduct of the suit and the payment of the expenses, and whether he finally bore any part of the expenses of that suit.

Ans. He advanced money to commence the suit, and received security for it; I think he conducted the suit under this arrangement, until about the time he went to Philadelphia. After learning that he had ordered the suit stopped, we then took a power of attorney from him to carry on the suit in his name. I think that at about that time we paid him up what money he had expended in the suit; my best recollection is, that we paid him this money in order to get the power of attorney to carry the suit on; and finally he did not bear any part of the expenses of the suit.

Int. 10. Did you see the machine which Mr. Brooks was using, and for the use of which you prosecuted him? If so, state how it differed from your machine.

Ans. I saw the machine; all the difference was in raising and falling the cutters; his raised and lowered the cutters by the use of a lever, instead of a rack and pinion, which we used.

Int. 11. Were you present at the trial of that case?

Ans. I was not.

144 Int. 12. Did you see the model introduced by Mr. Brooks, and relied upon by him as a defence in a subsequent equity

suit which you brought against him, and did you also see the model of his machine, which he was then using? If so, state what machine the first model was claimed to represent, how the two models differed from each other, if at all, and how they differed from your own machine.

(Objected to.)

Ans. I saw both models; the first model was claimed to represent a machine in the Springfield armory, used for cutting gun-stocks; I believe they call it the forming machine. The Springfield model had a vertical cylinder with cutters like Mr. Brooks's model; it also had a carriage passing by the cutters, which was swung back and forwards by hand; it was shoved past the cutters also by hand, to give shape to the work. In the Brooks model the carriage with the work in it was swung back and forwards by hand; I think it had a crank and gear to carry the work forwards past the cutters when it was working. In our machine the cutters were horizontal, and the work passed under the cutters by means of a crank and gear carrying the carriage and the work. We used a rack and pinion attached to the cutters, to lower and raise the cutters for a different depth of cut, while the work was being shaped; that was the only way that we could get out of some kind of cuts; we also used the same power to keep the cutters down to the patterns.

Int. 13. State whether or not Mr. Allen Goodman was a witness at the trial of the first case; and if not, whether you made any efforts to procure him to be a witness, and what those efforts were, and why he was not a witness. State all the circumstances fully.

(Objected to.)

Ans. He was not a witness; we sent him to New York to see Mr. Brooks's machine, and sent Mr. Bullock with him to get them familiar with Brooks's machine, so that we could use them as witnesses. We continued to send them every term of court, and I think the case was in court about three years, and they were there waiting for it. About the time the case was expected to be on, we went to Mr. Goodman and told him we expected the case would be heard at that time, sure. We also went to Mr. Bullock, to get them to go together. Mr. Bullock went, but Mr. Goodman declined to go, unless we would pay him five hundred dollars. We were poor, and thought we couldn't afford so pay it, so we let him slide by, and did the best we could with Mr. Bullock.

(The answer having been read over, and the words "and they were there waiting for it," interlined above, having been omitted by the commissioner, were added at the request of the counsel for the complainant, who said, in a jocose way, that "if a man had been there every term for three years, he deserved five hundred
145 and more;" and thereupon the witness said that Mr. Goodman had been paid for his time and expenses to his own satisfaction, so far as we knew. The language of complainant's counsel, stated above, was added to the record at the request of respondent's counsel.)

Int. 14. Will you state whether or not you paid all the expenses

of Mr. Goodman at his several visits to New York, and all he asked at the time for attending court; whether or not, at the time he demanded the five hundred dollars, he made any claim for past services or expenses, and also whether, at the time he was sent to New York to see Mr. Brooks's machine, there was any understanding or agreement with him in reference to his being a witness; and if so, what it was?

(Objected to as immaterial.)

Ans. We paid Mr. Goodman's expenses and all he asked for attending court; we paid his expenses while we were there with him, and paid him for his time afterwards. When he demanded the five hundred dollars, he did not make any claim for past services or expenses. The understanding between us and him was that he was to go and see Brooks's machine and get posted up in regard to it, and then to testify when the case came up for hearing.

Int. 15. Were you a partner in the company at Dana at the time the contract was made with Mr. Wheeler and Mr. Goodman for planing pianoforte legs? If so, state who were the other members of the firm at that time, and whether or not all the members of the firm had at that time, and during all the negotiations, an interest in the Hale and Goodman patent.

Ans. I was a partner in that company; the other members were my father and Hammond Doane; we were all interested in the Hale and Goodman patent.

Int. 16. State whether or not, during the pendency of these negotiations, Mr. Doane made any communications to you as to Mr. Wheeler's having explained to him a plan of a machine which he proposed to build for planing pianoforte legs; and what, if anything, Mr. Doane said in respect to its being an infringement of the Hale and Goodman patent.

(Objected to.)

Ans. Mr. Doane said that Mr. Wheeler had explained to him a machine for making legs, which Wheeler claimed was better than ours, and that he (Doane) understood it and that it would work. Mr. Doane said it was not an infringement of the Hale and Goodman patent.

Int. 17. Will you state what the reasons were why you entered into that contract; whether you thought at the time that the price you agreed to pay was a high or a low one; with whom the negotiations were principally made, and what, if anything, was said by either Mr. Wheeler or Mr. Goodman in respect to manufacturing legs on their own account, if you did not give them the contract.

(Objected to.)

146 Ans. Our reasons for doing it were to keep Wheeler and Goodman from getting up any other machines which they claimed they had in view. We considered the price which we agreed to pay was a high one—more than it cost us, considerable, to make them. To the best of my recollection the most of the talk was with Mr. Goodman. I think they represented to us that they were going into the business in competition with us, and should get up some

different machines that wouldn't interfere with ours. if we didn't give them the contract. We believed that they could do it, and gave them the contract.

Int. 18. State whether or not, while the contract with Wheeler was in existence, any change was made in the members of your firm; and if so, what it was.

Ans. Soon after the contract was made it was divided between Wheeler and Goodman, and soon afterwards, I think, Mr. Goodman sold to Mr. Skinner. Soon after this transaction Mr. Goodman and my brother Warren bought out Mr. Doane's interest in our concern. I don't recollect any change in the name of the firm at this time, but soon afterwards we took in other partners and added to our business. The new partners were George T. Johnson, Silas F. Lindsay, and Nelson Bosworth, and the name of the firm was then Johnson, Stimpson & Co.

Int. 19. State whether or not, while Mr. Goodman was a member of the firm, the subject was discussed by its members at different times of buying off Mr. Wheeler from his contract, or of getting rid of his contract in some way; and if so, state what were the reasons for desiring to get rid of the contract, and what were the reasons for allowing it to continue, and what was Mr. Goodman's position on the subject.

(Objected to.)

Ans. When we formed the new company it agreed to assume all the contracts of the old one, including the contract with Wheeler. Soon after we got started, the new members thought we were paying too much for the legs made by Wheeler, more than it was costing us to make them, and that we could make them just as well ourselves; Mr. Goodman and myself thought it was best to have the contract continue, rather than to have any new machines got up to enter into competition with us; and Mr. Goodman said that Wheeler would get up something that would avoid our patent and thereby enable others to compete with us in the manufacture of legs.

Int. 20. State whether or not you did finally make any agreement with Mr. Wheeler to give up this contract; and if such agreement was accompanied with any stipulation or agreement on his part about constructing new machines, state what it was.

(Objected to)

147 Ans. We arranged with Wheeler to take the contract. I think we agreed to buy his lumber at cost and give him a right to manufacture melodeon legs and newel posts for stairs. He stipulated that he would not make any new machines, but would use the machine which we had already in operation.

Int. 21. State whether or not you were acquainted with the patent obtained by Mr. Goodman for a machine called the cam machine; and if so, whether you or your firm ever had any interest in such patent, and why you obtained it, and whether you ever heard Mr. Goodman express any opinion as to its being an infringement of the Hale and Goodman patent; and if so, what such opinion was.

(Objected to.)

Ans. I was acquainted with that patent. Our firm, the firm of

Stimpson & Doane, bought an interest in it. Don't recollect how large, but it was a controlling interest. It was always represented to us by Mr. Goodman that it was not an infringement on the Hale and Goodman patent, and we were afraid that Mr. Brooks might get hold of it, and run it in competition with us. We bought it about the time of the trial of the first Brooks suit.

Int. 22. State whether or not your firm owned the Hale and Goodman patent about the time that it was expiring, and whether or not you had any communications with Mr. Warren Hale as to the extension of the patent. If so, state when and where such communications were made; what, if anything, he said to you respecting its extension, and in respect to your rights after such an extension should be obtained; what propositions he made to you, and what contract or trade resulted therefrom, if any. State all the circumstances fully, and as nearly as possible in the order of time in which they occurred.

Ans. The firm of Johnson, Stimpson & Co. owned the patent at that time. Mr. Hale had several conversations with myself and other members of the firm. I think Mr. Johnson was present most of the time, and Mr. Goodman part of the time. I think most of the talk was at my office. We might have met in the streets, perhaps. I think these conversations were some time in May, 1859. He said he had got his patent extended, or was about doing so. I understood it that he had already done so at the time. He said that we should have no further right to it after it expired on July 22, 1859. He proposed to sell it to us. I think he made a proposition to put the patent right against our shops and business, and bid for the choice. I told him I didn't think I should do it, as I didn't consider it good for anything. We had had a pretty good siege of it in New York. He afterwards offered to sell it to us, I think for ten thousand dollars. I don't remember fully all of the conversation. The result of it was that we concluded it would be better for us to sell out our works rather than to pay a high price for the patent, and we offered to sell out to Mr. Hale, and did so.

148 Int. 23. What price did you obtain?

Ans. Fifteen thousand dollars.

Int. 24. State whether or not you should have sold at that price, except for the representations of Mr. Hale respecting your rights after the expiration of the original patent, under the extension, or what were the reasons for making the sale on those terms, and whether or not Mr. Goodman knew what those reasons were at the time of making the sale.

(Objected to.)

Ans. We should not have sold for that price, except for his representations. Our reasons for selling to him was because we thought we had no right to use the machines that we were then using, after the patent expired. These were my own and my brother's reasons. I don't know that I talked much with Mr. Johnson at that time. We didn't want to sell. I concluded Mr. Johnson didn't like to sell, from what he said about Mr. Goodman. He said about that time that Goodman was a "damned rascal" for not letting us know that we had

a right to run the machines, as he was a partner in our concern at that time, and knew we had a right to run. I am not positive whether Mr. Goodman knew our reasons or not. I think he must have known something about it. I cannot say how much.

Int. 25. To whom did you sell, to Mr. Hale alone, or to Mr. Hale and others?

Ans. To Mr. Hale alone.

Int. 26. State, if you know, whether Mr. Goodman went to New York about the time or shortly before Mr. Hale came to see you; and if so, whether he went on business of the firm or on his own private business; whether he was in the habit of going to New York, and whether he met Mr. Hale there; and state also, if he went on private business, if you know what that business was, and if so, state it.

(Objected to.)

Ans. He did go to New York. He went on his own private business, I suppose. He never did any business for the firm in New York. Mr. Johnson and myself attended to the business of the firm. He was not in the habit of going to New York. I think he said he met Mr. Hale there, to see about getting the patent extended.

Int. 27. How long after the sale was made to Mr. Hale before Mr. Goodman went into business with Mr. Hale?

Ans. I don't recollect exactly the time. I think that Mr. Goodman told me immediately after the sale that he was going to take an interest with Mr. Hale, and I don't think the partnership was formed until the fall following. I think Mr. Goodman said afterwards that there was some difficulty between him and Mr. Hale; that they couldn't agree upon terms.

149 Int. 28. Did you know at the time of making the sale that Mr. Goodman had been to New York with Mr. Hale to see about getting an extension to the patent?

(Objected to.)

Ans. I did. He stated it on his return.

Int. 29. If, after the sale was made, Mr. Hale said anything to you about going into business with him, state when and where he first proposed it to you; and how often it was spoken of between you; whether you met him at New York soon after the sale was made; and if so, whether it was at his request; what the object of that meeting was, and what passed between you, or what you did there.

Ans. I think it was in July or August that Mr. Hale spoke to me about taking an interest in the works and business that we had just sold to him. I think the talk was in the street at Dana, as nearly as I remember. The result of our conversation was an agreement with him to meet in New York. The matter was spoken of frequently as we happened to meet. I met him in New York according to agreement. We met there, as I took it, to talk over how we would go into company. I made him a proposal, and I also went round and introduced him to our old customers as the man who was to take our place in the business, soliciting trade for him. Some of the customers asked him if I was to continue in the trade with him. If I was, they said they would continue to trade. If not, they should go to Loomis,

Lewis & Co., of Westfield. Mr. Hale replied to them that he expected I should; that we were talking about that. Before we went the round of all the customers, Mr. Hale I think went home, leaving me to solicit and get what trade I could, and said that he would give me an answer to my proposal about going into company when I got home.

Int. 30. If, while you were in New York, you had any conversation with any one in Mr. Hale's presence about going into business there, state with whom it was, whether you regarded the opportunity as a favorable one, and what, if anything, Mr. Hale said to you about accepting it.

Ans. I had a conversation with Mr. Levi Decker about going with him into the manufacturing of billiard tables. He called on me at the hotel when we were in New York. I don't remember that Mr. Hale heard any conversation with Mr. Decker, but I told him of Mr. Decker's proposal, and he told me to hold on until we got through our negotiations and saw what we could do together. I knew the manufacturing of billiard tables was a profitable business, and I had confidence in Mr. Decker.

(Answer objected to as immaterial.)

Int. 31. What answer did Mr. Hale give to your proposition after your return to Dana?

150 Ans. I think he said that Mr. Goodman wasn't willing to have me go into the company, unless I would pay something for the patent right, which I wasn't willing to do.

Int. 32. Did you have any further talk with him about going into business with him, until about the time of the purchase of the Westfield property?

Ans. I don't remember as we did.

Int. 33. At the time when the subject of purchasing the Westfield property came up, had you made any arrangements or come to any definite conclusion as to going into any other business? If so, what was it?

(Objected to.)

Ans. I had not decided fully what business to take up. I had three distinct kinds of business under consideration.

Int. 34. State what they were, and whether at that time you had any intention of engaging again in the manufacture of pianoforte legs?

(Objected to.)

Ans. One of them was a chance offered me by Hawes, Graham & Co., of New York, rosewood dealers, which I thought to be the best, and the one that I should most likely accept; another was Mr. Decker's proposal; and the third was manufacturing pails at Winchester, N. H. I had not the least intention of engaging again in the manufacture of pianoforte legs.

Int. 35. State, if you know, whether Mr. Hale knew of your having these opportunities, or either of them.

(Objected to.)

Ans. I think he knew of the Mr. Decker one. The others I don't know whether he did or not.

Int. 36. When and by whom was the subject of engaging in business with Mr. Hale again mentioned to you?

(Objected to.)

Ans. I don't remember the date of the proposal. It was made by George T. Johnson. My best recollection is that it was in September—it may have been in August—in the year 1859.

Int. 37. Will you state what Mr. Johnson said to you, for whom he professed to speak, and what you did in consequence of what he said to you, and if it resulted in the arrangement for the purchase of the Westfield property? Will you give a full history of the transaction up to the time when you went to Westfield to purchase the property, stating with whom you talked, or what interviews you had with different parties, giving it, as far as possible, in the order in which the events occurred?

(All that part of the question calling for conversations with persons other than the complainants, and at which they were not present, objected to.)

151 Ans. Mr. Johnson came to me when I was at work in my barn, and said that Mr. Hale wanted me to come and see him about taking him in the copartnership they were about getting up; that Mr. Hale had concluded to leave Mr. Goodman out of the concern, as he hadn't done as was agreed, and to put in Mr. Joseph Fales, a brother-in-law of Mr. Hale. Mr. Hale designed to form a partnership of his brother Lorenzo Hale, Mr. George T. Johnson, myself, himself, and Mr. Fales. I declined to go down at first, saying that I had nearly made up my mind to go into another business; that I had made one attempt to go into partnership with Mr. Hale, and concluded it was done with. He urged me to come down to his office and talk it over, if nothing else. I told him perhaps I would, and finally did go down. Mr. Hale said to me when I first went in, that he had made up his mind to form a company this week, (it was the last of the week then,) and to leave Mr. Goodman out; that he hadn't done as was agreed. He said further to me, "If you want an interest, now is your chance." I then asked him what kind of a chance he proposed to give me. He told me he proposed to have five partners, and to give me one-fifth interest. I think he named over the partners to me. He named the ones whom I have just named. I told him that I was not prepared to decide upon it then; that I had partly made up my mind to engage in another business. I think he asked me if I wouldn't make a proposition what I would do. I told him I was not prepared to then; I would think it over Sunday, and would let him know the first of the week. If he was in a hurry to form his partnership, not to wait for me, but to form his partnership, as I didn't think I cared much about it any way. I think I left the office after that. While I was thinking it over, I accidentally spoke to Mr. Oaks about the proposition I had had. I happened to be up at his house; he said to me, There are enough of you; why don't you go up and buy them out at Westfield, and control the whole business? I asked him if he supposed that could be done? He said he thought it could be. Soon after this conversation with Mr. Oaks I met Mr. Hale. I think I took

him into my buggy for the purpose of talking over the subject, which was open. He asked me what conclusion I had come to about going in with him. I then told him of the proposal Mr. Oaks had made for buying out the Westfield concern and controlling the whole, and asked him what he thought of that. He said he thought it would be a good idea, and he would go and talk with the rest of them about it. I supposed he meant the proposed partners. The result of his talking was that we had a meeting together of the proposed partners in his office. I think, but am not sure. Mr. Oaks was invited into the meeting. We talked the matter over, and I proposed to have my brother Warren take a share in it, and also to give Mr. Oaks a half a share, in
152 connexion with Mr. Goodman. I was anxious to get Mr. Goodman, for fear that he might start up competition, which we were proposing to buy up. I think Mr. Johnson objected to Mr. Goodman's coming in, as he seemed to have some feeling against him on account of his going to New York, as he did, to meet Mr. Hale, about getting the patent extended unbeknown to us, though one of our partners. He expressed considerable feeling to me several times, aside from this meeting, at Mr. Goodman's action in allowing Mr. Hale to represent that we had no right to use the patent after the extension, as he must have taken counsel in New York, and known differently. I think it was at my earnest solicitation that Mr. Goodman was accepted as one of the partners to take a half share interest with Mr. Oaks. I think he was then invited into the meeting, and we all, including Mr. Oaks and Mr. Goodman, met in the office of Mr. Hale. Then the agreement was made between us, as proposed partners, to go and see if that property could be bought at Westfield, and to buy it if it could be. The conversation was amongst us all. I don't remember who made proposals and who didn't, resulting in an agreement to make two distinct concerns, one at Dana and one at Westfield, carried on under two distinct names, as this was thought to be the best way to go into the market, to have it understood that we were two separate concerns, but to have our interests mutual. I think myself and Mr. Oaks were the parties named to go to Westfield to carry on the business at that place. Mr. Fales lived in Troy. He didn't propose to move, I believe, but was to be at Westfield some of the time, occasionally. I think then we agreed to delegate Mr. Oaks, as he had formerly worked for Loomis, Lewis & Co., and understood their works, to go and see about purchasing them. Mr. Fales also was delegated to go with him. Finally it was thought best to have me go as a sort of an adviser—to stay back—not to go directly with them. We started, three of us, with Mr. Oaks's horse, and went to Northampton and stayed over night there. The next morning we took the cars and went to Westfield, and I waited at the hotel while Mr. Fales and Mr. Oaks went to the shop of Loomis, Lewis & Co., about a mile distant. As finally agreed before we went to Westfield, the interest in the concern was to be divided into seven shares, of which Mr. Warren Hale, Mr. Lorenzo Hale, Joseph Fales, George T. Johnson, my brother Warren, and myself were each to have one share, and Goodman and Oaks each half a share.

Int. 38. Will you state what was done at Westfield?

Ans. During the forenoon that Messrs. Oaks and Fales went to see Loomis, Lewis & Co., they came back to me at the hotel, and said they thought they could make the purchase, but wished me to go down with them and see Loomis, Lewis & Co. and help them to make the trade. I did so, and accomplished the trade by agreeing to
153 pay ten thousand dollars for the real estate, machinery, and fixtures; to pay two hundred dollars down to bind the bargain, one thousand dollars more in a week from that time, and having agreed to take their stock off of their hands, some legs, finished, unfinished, &c., and veneers, and put them all in the bill, and the balance of the amount to be paid in equal quarterly payments, when that balance should be ascertained by taking account of stock. We went to a lawyer's office to make writings, when Mr. Loomis refused to take writings without my signature. I didn't propose at first to sign them, as Mr. Fales and Mr. Oaks were directly delegated to make the trade. Rather than to have the trade broken up, I signed the papers with them. These papers were a bond or agreement of some kind to take the property. I think it was a bond on the conditions as I have stated before. Mr. Oaks was to be left there to take account of stock with Messrs. Loomis and Lewis, while Mr. Fales and myself went back to Dana to report to the other proposed partners.

Int. 39. What did the whole amount of the purchase finally prove to be, when the account of stock was taken?

Ans. I think it was between sixteen and seventeen thousand dollars—very nearly seventeen thousand dollars.

Int. 40. Who paid the two hundred dollars which was paid at that time?

Ans. Mr. Joseph Fales paid it out of his own money.

Int. 41. State whether the machine, the model of which has been introduced into the case and marked "Stimpson, H. L. H., U. S. com.," was included in the purchase; and if so, whether between that time and the commencement of this suit, you have had in your shop or used any other machine for planing legs.

Ans. That machine was included in the purchase; also two-thirds of a patent right taken out by Mr. William N. Oaks; and between the times mentioned I have not used any other machine.

Int. 42. State what occurred in relation to completing the purchase and the formation of the company after you left Westfield, including all conversations which you had with any of the parties you have mentioned who were to be partners.

(Objected to.)

Ans. After Mr. Fales and myself left Westfield, we took Mr. Oaks's horse at Northampton and went back to Dana, leaving Mr. Oaks to take account of stock of Loomis, Lewis & Co., at Westfield. During our ride home to Dana we had considerable conversation in regard to the purchase, and Mr. Fales seemed to feel a little uneasy about the purchase, not understanding the business. He said, We have gone into a pretty big operation. Suppose the folks don't take it off of our

hands when we get home. There are no writings made to
154 bind them to do so. To quiet his fears I said that I thought it was a good purchase, and that they would take it. If not, I thought the parties we bought of were sick of their bargain, and would take it back again; that I thought we could get out of it some way; and that if we couldn't, we could keep it and run it ourselves. After we got to Dana we reported to the proposed partners what we had done. I think it was the next day there was to be a cattle show at Athol, and we agreed to have a meeting at the hotel there, and to have the writings drawn up—writings of copartnership—and to select the names that each firm should bear. We had considerable conversation at this meeting; I don't recollect it all. Mr. Johnson raised objections to my going to Westfield; said he had just as good a right to go as I had. I said it was agreed upon beforehand that I was to go, and I had made my arrangements accordingly. We took a vote as to what the names of the concerns should be. Before this vote Mr. Johnson objected to having two names. I think he was voted down on his proposition, and before we came to any conclusion it was time to go home—it was Saturday night, I think—agreeing to meet Monday morning at Mr. Hale's office, at Dana. We met at Mr. Hale's office Monday morning; all of the proposed partners, except Oaks. I found Mr. Silas F. Lindsay there, a brother-in-law of Mr. Hale. I expressed some surprise to Mr. Johnson at finding him invited in, and asked him what it meant. He said he or we thought it best to give him a chance in with us. I told him I thought there were too many already; I didn't think it best. He said, Well, let us go ahead and talk it over, and see what we can do. After we got in, a majority of the parties present wanted to go ahead and vote upon whether we should have one name at both places, or have two names, as was agreed. I objected to it, saying that it was agreed to have two names, one at each place, before we went to purchase the Westfield property. Then I believe they went ahead and voted on that point, and carried it, to have one name at both places, myself, my brother, and Mr. Goodman, I believe, voting against it. Then I think propositions came up from different ones, what that name should be. I didn't take any part in the action myself, except to vote against the propositions as they came up. There were several names mentioned, as Johnson, Hale & Co., Johnson, Stimpson & Co., and Warren Hale & Co. I think Mr. Fales proposed and voted for the name of Johnson, Stimpson & Co., that being an old-established name in the business. It was finally voted to have the name Warren Hale & Co. at both places—myself, brother, and I think Mr. Goodman voting against it. It then came up about raising this thousand dollars we had agreed upon to be paid in a week towards the Westfield property. I believe Mr. Johnson proposed to make a note, and to go to the Athol bank
and get it discounted. I think he proposed to have two
155 indorsers. I don't now remember who were the signers and who the indorsers. I put my name as one or the other, I don't remember which. This was the conclusion of this meeting. As we started out of the office to go about our business, my brother War-

ren said he shouldn't go ahead under this arrangement. I told him to hold on, and not be too hasty; that I knew it was contrary to our agreement made before going to Westfield; that I was going to New Salem, and I would consider what was best to do. I went along to my house, and Mr. Johnson went to the barn back of my house to get his horse to go to Athol to get the note discounted. I told Mr. Johnson, when he was harnessing his horse, that I didn't think I should go ahead under the present arrangement, as it was contrary to our agreement. He said then he wouldn't go after the money. I finally told him to go ahead and get his money, that I was going to New Salem, and would see him after I got back, the next day. After carefully considering it through the night, until the next day, I called Mr. Fales into my house, and told him that I had made up my mind, by the advice of my friends, not to go any further in the matter; that they had gone contrary to all agreement in getting up the company, and that I didn't feel under any obligations to continue in the arrangement any further; that my brother Warren had decidedly declared that he would not go in under the arrangement they had got up; that he was the only party then in Dana directly interested with me, or held for the purchase at Westfield, and that I called him in to have a talk with him. I told him that I proposed to leave the concern entirely, and as easily as possible; that if he chose to go ahead, and any of the proposed partners would go ahead, and take the property at Westfield off my hands, that they could do so by paying my expenses down there, which I thought they ought to do, but that I wouldn't let that stand in the way; that I wanted to get out as easy as possible, and not make any disturbance; that I thought they didn't consider me of any consequence as a business manager, not having used my name at all in their doings the day before; that they had got partners enough without me; if not, Mr. Flint Peckham would be a better man for them than I, because he could do more work, if that was what they wanted. Mr. Fales said he would go and see the other partners, and make the proposal. I think at that interview I mentioned my objection to taking in Mr. Lindsay, as being more in the firm than was agreed upon. After a time, I don't know how long, he came back to my house, and said they declined to have anything to do with the Westfield property unless I would go ahead. He seemed to be somewhat uneasy in regard to the position he occupied as to the Westfield property, fearful of a loss in some way. I told him I didn't wish to have him suffer in consequence of my action in the matter,
156 not in the least; that I didn't feel I was to blame in deciding not to go on; that I should have gone on if they had done according to the agreement made before the Westfield purchase, but that I didn't consider it for my interest to go ahead under the arrangement that they had got up, as it was entirely different from all agreements; and he said he knew it. I think he then asked what we should do with it, what action we should take. I said to him, You know we thought coming to Dana that the Westfield fellows were sick of their bargain in selling out; that you thought we could get a bonus in letting them have it back again; that the property is in our hands, to do

with as we choose, as they have not done according to agreement. He assented to it, and said, What course would you take? I told him, to make him feel perfectly easy, that he wasn't going to lose anything. I would make a proposition that we go to Westfield and sell it back to the parties we bought of, providing Mr. Oaks would consent to that course, and make what we could on it; if we could make any profit, make it; if not, let them have it at any rate, at cost. He said he didn't know whether we could or not. I said, if you want to be relieved we will take my brother Warren with us, and put his name in your place, so that you shall be relieved from any anxiety in the matter. He said that was a good idea, and we agreed to go the next morning to Westfield. Before the conversation with Mr. Fales, upon my return from New Salem, I met Mr. Johnson near the store, and he said, Well, what conclusion have you come to? I told him that I had been thinking of it carefully since I saw him last, and had concluded that it was best for me not to go into it, since they had broken up the first arrangement, and didn't show a disposition to do as they agreed. This conversation was broken off by my father coming up. He said, Warren, my brother, had just been telling him about our doings, and that I was very foolish to think of going into so large a company, with my business in the firm of Johnson, Stimpson & Co. all unsettled; that I had no ready money to go into business with. This is all I recollect of that conversation. I think that ended it. The next morning myself, brother, and Mr. Fales started, according to our agreement, to go to Westfield. On arriving at Belchertown, where we took the cars, I was somewhat surprised to meet Lindsay and Johnson; didn't know what it meant. Mr. Johnson said to me, We are going down to Westfield to see what kind of a purchase you have made. I think I made no reply. On getting into the cars Mr. Lindsay took Mr. Fales and went into the saloon of the car, on one side, shut themselves up, and rode most or all of the way to Westfield in that way. On arriving at Westfield Mr. Fales and myself and my brother Warren, I believe, but am not sure, went to the shop to see Mr. Oaks. Mr. Lindsay and Johnson went in another direction—to the hotel, I believe. During our walk to the
157 shop, in conversation, I found that Mr. Fales felt different from what he did the night before, when he agreed to go back and dispose of the property. I thought it was in consequence of his talk with Lindsay. I don't remember what was said, except one remark, which was, "Do you really mean what you said the night before, to sell this property back again?" I said, Certainly, I came here for a straightforward purpose, and to carry out the agreement made between us the night before. When we got to the shop we saw Mr. Oaks. I don't remember which one of us stated the case to Mr. Oaks. I think it was myself. I told him what we had tried to do at Dana, and had failed to do; that they had failed to live up to the agreement made before we came to Westfield; that I thought it, under all the circumstances, for my interest not to go any further in it; and then told him of the agreement with Mr. Fales to dispose of the property back to the parties, with his (Oaks's) consent. I thought Mr. Fales

seemed anxious to talk with Mr. Oaks alone, and I gave him an opportunity to do so. After awhile Mr. Oaks came to me and said he had been talking with Mr. Fales about the transactions at Dana; that Mr. Fales thought best to hold on to the property, and go ahead as they had got started, letting me go out as I wanted to. He told him he shouldn't agree to anything until he had seen me. He asked me for further explanation of our doings at Dana. I gave them to him, and gave him my reasons for declining to go along, which were, that Mr. Lindsay had been invited into the concern, contrary to agreement and to my wishes, making the shares smaller; that they had given both concerns one name, and that name was Warren Hale & Co.; that I had been the longest and was best known in the business; that they had shoved me in a corner where my name wasn't to appear; that a greater part of them were brothers and brothers-in-law, and that I thought their spirit shown towards me in voting would render it very unpleasant for me to go ahead with them; and further, that my business in the firm of Johnson, Stimpson & Co. was unsettled, and that I had no ready funds, and was not really ready to go into business; that if I was, I thought the offer of Hawes, Graham & Co. was a much better one, and more pleasant for me to accept; and that I was fully determined not to go ahead. I think I asked him what he thought best to do about disposing of the property back again. He said he didn't feel inclined to do it; that he had got a chance in business, and he wanted to hold on to it. I said, very well, any agreement that you and Mr. Fales can come to to release me from that bond signed to Loomis, Lewis & Co. I will be satisfied with, if you will pay my travelling expenses for coming down here to make the purchase; that I wished then I hadn't signed the writing, as I had first determined not to. I think he left me then, and went and talked with Mr. Fales during the most of the day. He came back to me
158 some time in the day, and said that he wished I would go ahead some way. I told him he had my decision, and that I shouldn't change it, I thought. He said he didn't believe he could make any arrangement to go ahead with them; that he shouldn't go ahead unless he had something in writing from them to show what kind of a chance they would give him if I went out; and that he wouldn't consent to my going out until he had made some kind of an arrangement that was satisfactory. I told him the trade was between him and Mr. Fales; that anything that would satisfy them would satisfy me. That is all that I recollect that day. I think the next day Mr. Oaks came to me and asked me who had got the money to pay the one thousand dollars that was to be paid in a week. I told him I hadn't seen it; that I presumed Mr. Fales had got it, but I didn't know. He said that during his conversation with Mr. Fales, Mr. Fales intimated to him that he had the money, and that he should let the property fall back into the hands of Loomis, Lewis & Co., and lose the two hundred dollars, and that he (Oaks) would have to lose his proportion of it. He said he thought they knew that he had not any money, and that was done to press him into their arrangement. I told him, as far as I was concerned, I didn't care if they did. I had rather lose my portion

of it than to have any further fuss with it. He left me and went up into the village. I didn't know what for. When he came back he said he wanted it understood that he had friends, if he hadn't money; that he had found a man up street who would furnish him a thousand dollars at an hour's notice. He did not give his name, but I afterwards learned it was Mr. Samuel Horton. He said that his friend was out of business, had plenty of money, and would take a share with him in business, provided he didn't make any arrangement with other parties. Soon after this Mr. Fales came round, and we were all three together. I think my brother was also with us. I don't know what conversation Mr. Oaks and Mr. Fales had had together, but I thought they were a little excited. Mr. Fales said, I will take all the property on my own shoulders. Mr. Oaks said, So will I. I said, Don't be too hasty, and suggested that Mr. Oaks should go to Dana and see the parties there, and try to arrange it so as to avoid a break-up. I said I didn't wish to decide between them which should have the property. I counselled moderation, and it was decided Mr. Oaks should go to Dana. At the depot Mr. Fales said to me, I am going down to see my friends at Munson, (and I think from there to Troy, where he lived,) and if you have decided fully, Mr. Stimpson, not to have anything more to do with this concern, I want you to tell Mr. Hale and the rest of them to count me out, as I have decided not to have anything to do with it unless you do. Mr. Fales went to Munson, and Mr. Oaks and myself to Dana. After we got to Dana Mr. Oaks left me, and I went to my house. I think some time in the next forenoon he came to me
159 and said that the day before he had seen the parties, and had made an arrangement for them to meet at his house that evening, but that they didn't come, as agreed; that he had just been down to the village, to see what the reason was; that he found Mr. Warren Hale and Mr. Johnson had left town very slily. I said, What do you suppose they are up to now? I said, I will go down and see Goodman and Lorenzo Hale. I went and saw them, and told them that I didn't want any boys' play in this matter; that I was going to attend a meeting of the stockholders of the Millers' River Bank on Monday next, (this was about the middle of the week,) and that I wanted a definite answer before that time, whether they would make any arrangement with Mr. Oaks, so as to go peaceably and take the property off of my hands. If they didn't, that I should take the afternoon train from Athol to Westfield, and run the property myself, and take the consequences of the bond, which I supposed they would shake over my head, and pay the bonds if I was compelled to, as I guessed I could afford to, as I thought it was a good purchase. I didn't see why they couldn't take it and go along, and make some arrangement that Oaks would be satisfied with, so as to release me, and not hang along in that kind of way, and put me to further trouble, as I had persuaded Mr. Oaks to come up, and had come up with him myself, to make such an arrangement. I think I gave them the word that Mr. Fales sent. My reasons for saying this to them were, that I thought they would be more likely to take the property off of my hands. I think Mr. Lorenzo Hale didn't make much reply any way, and I

think Mr. Goodman said, so far as he was concerned, he didn't want the property. I went the next Monday from Athol to Westfield, as I told them, not having heard anything from them. This was the end of all attempts to form the company.

Int. 43. What bond was that to which you last referred?

Ans. It was a bond given to Mr. Warren Hale, when we sold out to him, to keep out of the piano-leg business.

Int. 44. State, if you know, whether the one thousand dollars was paid within the time stipulated; and if so, when and by whom.

Ans. It was paid the last day of the time stipulated, by Mr. Joseph Fales, while we were at Westfield the second time, and before Mr. Oaks and I went to Dana.

Int. 45. Did you have any negotiations, after the transactions you have just referred to, with Mr. Fales, in respect to his connexion with the Westfield property? If so, state what they were, and when and where they took place.

(Objected to.)

Ans. We, Mr. Oaks and myself, and my brother, I believe, had a conversation with him. I think it was the second time we were at Westfield, but am not sure.

160 I am not sure whether my brother was present or not, or whether the conversation was at Westfield, or whether it was between Westfield and Palmer on board of the cars, but it was the second time we were at Westfield, and just before going, or while we were on the way to Dana. We three, Mr. Fales, Mr. Oaks, and myself, went together as far as Palmer. I think it was during the ride from Westfield to Palmer that the arrangement was made to this effect. Mr. Fales said he must be in Troy at a certain time, which I don't recollect, but it would be before we should be likely to get back from Dana. I believe he was to meet his family that day at Palmer to go to Munson. The understanding we came to was, that Mr. Oaks and myself should go to Dana, and that Mr. Oaks should see the proposed partners, and see what arrangement could be made to allow Mr. Oaks to go ahead and release me, and Mr. Fales too, I think; and on our return to report to him how we succeeded. I think we wrote to him after we returned from Dana, to come down and see about the property. He came down from Troy, and I believe I stated to him the result of our visit to Dana, and told him what I told them about going into it. I asked him if he wanted to go in with us. He said he would like to, if it were not for his connexion with Mr. Hale; but that being a brother-in-law of his, it wouldn't be pleasant for him to do so, he thought, but would sell out his interest to us, I think. I believe I asked him what his terms were. He named them; a Steinway piano, I think, and a stool, we to pay his expenses. We traded in that way; and, with the consent of Loomis, Lewis & Co., put my brother's name in his place on the bond.

Int. 46. Can you fix the dates of these transactions; and if so, what means do you have for doing it?

Ans. The date of the purchase of the Westfield, I see by the writing executed to myself, Oaks, and Fales, was the twenty-second

of September, 1859. The date of the note given by Mr. Fales, and indorsed by myself and Warren Hale & Co., as appears by the bank record, was September twenty-sixth, 1859. This corresponds with the record on my note-book at home. I fix the time of Mr. Fales's visit from Troy, and of our settlement with him, by a note given, promising to deliver to Mr. Fales a Steinway piano and stool, and another note promising to pay Mr. Fales thirty dollars on demand; both of which notes are dated October sixth, 1859, at Westfield.

Int. 47. What was the consideration for the piano?

Ans. We gave him the piano for his interest in the Westfield purchase, or for a bonus to induce him to sell out. The value of the piano was about $260, and the stool from five to eight dollars. The note for $30 was in payment for his expenses in going down to make the purchase.

Int. 48. Have you any means of fixing the time of your
161 negotiation with Mr. Hale, at New York? If so, please state when it was; and if it is a letter from Mr. Hale, insert it.

Ans. I received the letter here handed to the magistrate to be copied into the record. (The letter handed to the magistrate read as follows:)

NORTH DANA, *Sept.* 1*st*, 1859.

Mr. C. M. Stimpson:

DEAR SIR: I promised to write you in regard to your entering our firm in No. D., as soon as I could get it before our folks here, &c. We have consulted the matter at several meetings this week, and find that we are unable to give you an answer corresponding with your proposal. I am myself favorable to the change on many accounts, but there is an objection to your entering without paying for the patent by some; they say that you knew that before you left here. Should there be any change in regard to the matter before you return, I will inform you at once. You know that I have to be governed, in a very great measure, by the interest of others—cannot do contrary to their wishes in every case. We have not got our firm established yet, but hope to soon. We received yours of 29th and 30th yesterday. Will endeavor to please all our customers in every respect.

Truly yours,

WARREN HALE.

This letter was received from him while I was in New York, after he went home, and just after the time when I introduced him to my customers there.

Int. 49. Will you state whether you had any idea of making a purchase of the Westfield property before it was suggested to you by Mr. Oaks; and to whom you first mentioned the subject after Mr. Oaks's suggestion?

(Objected to as immaterial and incompetent.)

Ans. Knowing as I do what has been said by the way—I am aware that I am under oath, and I want to make my statement on this point as strong as possible, and I answer decidedly, No; and I will say fur-

ther that it never entered my mind. The first person to whom I spoke of it, after having had it suggested to me by Mr. Oaks, was Mr. Warren Hale.

Int. 50. Had you any object or purpose in view in entering into the negotiations which resulted in the purchase of the Westfield property, and in doing what you did in relation to the purchase, other than that of securing the property for the benefit of all the parties who had been associated together; or had you any design to violate the obligations of your bond, and to escape its penalties, in what you did at that time?

(Objected to as incompetent and immaterial.)

162 Ans. My only object was to secure the property for the benefit of all the parties associated together. I never thought of evading the bond.

Int. 51. When you sold to Mr. Hale, in May, 1859, what was your opinion as to the price which you obtained for the property; that is, whether it was a high price for you to get and for him to give, or not?

(Objected to.)

Ans. I remember of having expressed myself in this way, that I thought it was more than he could afford to give, as since he was in it the business had entirely changed, and new customers had taken the place of the old ones. When he was first in the business he sold nearly all the legs unveneered, and the customers veneered them, but at the time I sold out, the manufacturer veneered nearly all that he sold; but at the same time I said, it was not what it was worth to us, having our houses and property and acquaintance, and having spent a good deal in getting our business established. We had been burnt out and had got our new shops built up and well agoing. I expressed this feeling frequently, but I don't recollect to whom.

Int. 52. After you had purchased Mr. Fales's interest in the Westfield property, did you go on with the business there under the name of Stimpson, Oaks & Co.?

Ans. We did.

Int. 53. State whether or not you issued circulars to the trade, and if so, how soon; and if you delayed issuing them for any reason, state what it was.

Ans. We did issue circulars, and we delayed issuing them for some little time after my brother took Mr. Fales's place. My reasons for delaying, as I expressed to Mr. Oaks, were that although I had expressed myself to the Dana men in the way I did, yet I did not feel like going into it, and I advised him to get some one else. I think he went to see Mr. Samuel Horton. They talked some days about it, and finally Mr. Horton said, as he was unacquainted with the business, and Mr. Oaks was unacquainted with the market, he didn't like to go in unless I went in too; that he would take a share if I would. Mr. Oaks told me that Mr. Horton said this. I told him, if I had anything to do about it, I didn't know as I cared anything about Mr. Horton; there were enough of us without him. I thought it would be an unpleasant competition the way it stood, with the bond standing against me; if I went in, that I should attempt to make negotia-

tions with the Dana concern to see if we couldn't come to some satisfactory arrangement like the first, or as near like it as we could; so as not to run each other in the market, but to have good feeling between the concerns, and establish a uniform scale of prices, &c. Mr. Oaks said that he was not bound to keep out of the business, if
163 I was; that if there was any trouble to arise out of the bond in consequence of his going in, he would bear his proportion of it, and this agreement was put in our articles of copartnership. This all took place after the purchase from Mr. Fales, and before we issued our circular.

(Whole answer, except the first sentence, objected to.)

After reading over the last answer, the witness added:

We delayed making our writings between Oaks, myself, and brother, having heard that Mr. Johnson and Mr. Hale had gone to New York, and thinking perhaps they might come that way and make some arrangement on their way home, but they didn't come; and when I consented to go in, I took one-half interest in the concern, thinking at the time that there would be some change before long; that they would come round and make some arrangement with Oaks.

Int. 54. State what your opinion was at that time as to your liability on the bond, under the circumstances.

(Objected to as incompetent and immaterial.)

Ans. I supposed I was liable under the bonds to prosecution, and always supposed so, and expressed myself so to Mr. Oaks when I proposed to him to make an arrangement with the Dana concern to get up the bonds. I expressed myself in this way—that I thought it would be bad for our credit, starting in a new place in this way, with the bonds hanging over us.

Int. 55. State whether or not you took any steps, soon after purchasing the Westfield property and forming your new company, to open negotiations with the Dana company, with a view to a common understanding as to prices, and a mutual interest in profits. If so, state what they were. I refer particularly to what you did personally, as well as to what your company did, and what passed between yourself and your partners upon the subject, and limit my inquiry to the preliminary steps that were taken before the actual opening of negotiations.

(Objected to as incompetent and immaterial.)

Ans. After we got our company in working order, issued circulars, &c., and ascertained who the partners were, or were to be at Dana; I, by the consent of my partners, took steps to open negotiations, and wrote to Mr. Goodman, I believe. I wrote to him because I thought he felt especially friendly towards me, on account of the interest I took in getting him an interest in the company, as at first arranged. I thought he would act upon the other members of his company, and bring out good feeling, and effect an arrangement satisfactory to both parties. After the correspondence, I think Mr. Hale and Mr. Goodman came out to Westfield to see us; I think it was at this time, but am not sure, that the arrangement was made to meet at Greenfield.

Int. 56. Have you a copy of the letter you sent to Mr. Goodman, or have you any letter received from him in reply?

164 Ans. I don't know whether I have or not; I haven't looked to see, but I presume I have both a copy of my letter and of his reply on file at home.

Int. 57. State what passed between you and Mr. Hale and Goodman, at the interview which you had at Westfield, or at any interviews that you may have had before you met at Greenfield.

(Objected to.)

Ans. I don't recollect the particulars of the conversation; I think it was more with Mr. Oaks than with myself; my best recollection is that it was to talk over the particulars of the arrangement to be made; my recollection is that it was proposed to have the writings made at Westfield, but there seemed to be some objection to it, and we finally agreed to meet at Greenfield, on neutral ground.

Int. 58. What, if anything, did Mr. Hale say at that interview, or at any time before the Greenfield meeting, as to your having violated your bond to him, or made yourself liable under it? and what claim, if any, did he make in respect to it?

Ans. I don't now remember of anything.

Int. 59. State what he said, if anything, about the use of the Oaks machine, or about its being a violation of their rights.

(Objected to as immaterial.)

Ans. He said nothing about it to me, to my knowledge.

Int. 60. What did Mr. Goodman say, or any other member of the firm at Dana?

(Objected to as immaterial.)

Ans. I make the same answer as before.

Int. 61. What, if anything, was said at any of such interviews by either Mr. Hale, Mr. Goodman, or any other member of the Dana company, as to your taking the Westfield property, and going on the way you did?

(Objected to.)

Ans. I don't think there was anything said.

Int. 62. Was any complaint made by them at any time, that you had practiced any trick or deceit upon them, or that there was any unfairness in what you had done?

Ans. No complaints of this kind, whatever, were made to me.

Int. 63. Was any demand ever made upon you by the Dana company, or Mr. Hale, or by any of the other members of the company, or by any of the parties to the arrangement made previously to your going to Westfield to make a purchase, to give up the Westfield property, or was any offer made to take it off of your hands?

(Objected to as leading.)

165 Ans. None whatever, excepting what I have mentioned in the conversation with Mr. Fales.

Int. 64. How long before you went to Greenfield was the arrangement made to go there?

Ans. I don't know exactly; the trade was under consideration for

some weeks; I can't fix the date; we commenced negotiations soon after we got going, and completed them as quick as we could.

Int. 65. Who were the parties who met at Greenfield?

Ans. Mr. Warren Hale, Allen Goodman, William N. Oaks, myself and my father-in-law, Mr. Charles Phipps.

Int. 66. How came Mr. Phipps to be present, and did he take part in the negotiations?

(Objected to as immaterial.)

Ans. He was assisting us in our business at the time; my brother wanted to stay at home and take care of the shop, and he gave him a power of attorney to act in his place; he did not take any part in the negotiations.

Int. 67. Why did he not take part in the negotiations, and who was present when the negotiations were going forward?

Ans. The reason he didn't take part, he was objected to by Mr. Hale and Mr. Goodman; so there was only myself and Mr. Oaks, and Mr. Hale, and Mr. Goodman, four of us, present.

Int. 68. State whether the negotiations resulted in an agreement, a copy of which is annexed to the bill of complaint, and whether any other agreement was made relating to other matters than those mentioned in the agreement referred to; and if so, whether such other agreement was written or verbal, and if verbal; state what it was.

Ans. The negotiations did so result; I think there were two or three other agreements made verbally; one of them was for Mr. Hale and Goodman to see about buying out Mr. Lyman Wheeler, on their return—to buy out his leg machine and his fixtures for making legs—cauls and patterns, his water privilege, and a piece of land; I think they said they had had some talk with him on their way out; this agreement was made more particularly with Mr. Oaks than with me; it was talked over before me at the time of making it, and afterwards; I believe they said they could buy him out for $800, and pay him in instruments. They were desirous of having us bear a portion of the expense of getting him out of the business, so that there wouldn't be his competition in the way; we made an offer to give a piano towards buying Wheeler out; they thought it wasn't quite enough. There was some further talk about it, and I believe we finally offered them a melodeon in addition; the particular piano and melodeon
166 were specified; the piano was one at my brother's, at Winchester, N. H., and the melodeon, one at Westfield. I think the division of the spoils was, we were to have the leg machine, and they were to have the water privilege and the land at Dana. We considered that the property was not worth what we were giving for it, but we wanted to get him out of business. I think that it was agreed that if they had to pay any cash in the trade, we were to give them $100 in cash, and to keep the melodeon, I think. The other agreement was to exchange lists of prices which we were selling our work for.

Int. 69. State whether you had any further correspondence with them, after the interview at Greenfield, or communications with them in any way, relative to the Wheeler purchase, and whether the agree-

ment was ever carried into effect, and if not, why not; and will you look at a copy of a letter in Mr. Oaks's deposition, in answer to the seventeenth direct interrogatory, and state whether you received the original to that letter, and what reply you made, or what you did in consequence thereof?

Ans. Soon after that agreement we received a letter from Mr. Hale and company, the copy of which is set forth in Mr. Oaks's deposition, in the answer to the seventeenth direct interrogatory; I don't remember whether we answered the letter or not; it seems to me that we did; I don't know what we said. The agreement was not carried into effect; I don't know why not.

Int. 70. State whether the agreement in respect to a uniform scale of prices was carried into effect, or whether any further communication was had between the two firms, in respect to a scale of prices; and if so, what it was.

Ans. I think the agreement as to prices was not carried into effect; I have repeatedly tried to have a uniform scale of prices, but no response to my efforts in that direction from Warren Hale & Co., in the last part of my efforts; the letter referred to is the only thing I remember.

Int. 71. State what your own course was in respect to underselling Messrs. Hale & Co. in the market, subsequent to that agreement; and if you know, state what the fact was in respect to your prices being higher or lower than those of the Dana company, and what you did at various times in regard to reducing your prices, or raising them.

Ans. So far as I know our prices have always been higher than theirs. There were one or two customers that we reduced the price to, during the hard times after the war commenced; I don't think of but one now; this one, Phelan & Collender of New York, represented to us that they should make their own legs unless we reduced our prices. There were one or two customers more that we sold some inferior work to at less than the price of first class work; with these exceptions, I think our prices were higher than theirs; at least I have been repeatedly told so by parties buying legs, and have letters
167 to that effect. I also have seen some of Hale & Co.'s bills for legs, and the prices on those bills were less than ours for the same style of legs. Since the rise took place in everything, I think within a year past, we made quite an effort to induce them to raise their prices, but didn't succeed, and we raised ours alone—I mean by saying that we did it alone, that our firm did it first.

Int. 72. Will you state whether you ever reduced your price to any person, for the purpose of securing contracts or orders which would otherwise have gone to the Dana company?

(Objected to.)

Ans. I have never intended to, and don't think I ever have. (Mr. Smith, respondent's counsel, suggesting that the point of the inquiry was, whether he ever did it for that purpose, the witness said, No, sir; and complainant's counsel objected to the suggestion.)

Int. 73. Referring to the agreement, in writing, of March 7, 1860, made at Greenfield, will you state whether any particular machine

was referred to, or was the subject-matter of the clause in said agreement authorizing Stimpson, Oaks & Co. to use the improvement patented to Hale and Goodman, and if so, what it was? State the circumstances which led to the introduction of that clause into the agreement.

(Objected to.)

Ans. My best recollection of the circumstances is, that we wanted another machine to run at our works, as the one we had wouldn't do work fast enough. Mr. Oaks thought it would be cheaper to build one after Mr. Hale's plan than one after his own. He said that it wouldn't pay to build one after his own (Oaks's) plan to run two years. He suggested, or some one did—the suggestion came up—that we exchange the use of the patents mentioned in the writing. We didn't build one, because we expected to have the Wheeler machine.

Int. 74. State what was said, if anything, about your taking a license to run the Oaks machine which you then had in use; or about that machine containing the improvement known as the Hale and Goodman patent.

(Objected to.)

Ans. There was nothing said about it at all. There was nothing thought about it, except that we had the right to run. I always supposed that the reason it was bought up was because it had the right to run—to get it out of the way.

Int. 75. State whether you then understood, or had any reason to believe, or did believe, that either Mr. Hale or Mr. Goodman understood that this clause referred to the Oaks machine you then had in use.

Ans. I don't think it was understood by them, or by any-
168 body else, to refer to it. I didn't so understand it myself, and I did not believe, nor have any reason to believe, that they so understood it.

Int. 76. Will you refer to the clause in the agreement relating to the rendering of accounts by the respective parties, and state whether that stipulation was carried into effect, and if so, for how long? and if parties ceased to carry it into effect, state the circumstances fully which led to such cessation.

(Objected to as immaterial and incompetent.)

Ans. It was carried into effect by me until Mr. Hale said he would have nothing further to do about it. I rendered an account according to the agreement, I think every time first. At one time I thought I would wait and let the time run over a little, and see if they wouldn't render an account to us first. I don't know how long it run over, but about that time my brother was up at Dana, to see something about a steam dry-house they had. He came back and said that Mr. Hale said that he would have nothing more to do about the Greenfield agreement. I couldn't learn the reasons sufficiently plain from him why it was, so I took pains to go up on purpose. I met Mr. Hale at his office, and said to him, that I had understood that there was some misunderstanding or dissatisfaction about the agreement; that he said he wasn't going along any further. I asked him if it was so, and if so, what were his reasons. He said that we hadn't lived up to the

agreement. I told him I didn't so understand it; that I made the agreement in good faith, and intended to live up to it. He asked why we had not settled according to the agreement. I told him I thought we had; that we had sent our statement every time first. He said we agreed to settle. I told him I thought not; that we wouldn't quarrel about it, but could read it over, as I supposed that he had got a copy of it. He went to his safe and took it out and read it over, and found that he was wrong, and admitted it; but said he would have nothing more to do with the agreement, or about it; that I thought I was going to have the Wheeler machine, but that I shouldn't; I told him that I had made the agreements in good faith, and intended to live up to them, but that I couldn't live up to but one side. I left his office and went up to my father's house, who was then interested in business with us. Some little time after this, Mr. Goodman came to Westfield. I think he came to my house, and said he came out to settle up that matter. I think I complained to him something about my coming up there to have the matter arranged, in good faith; and about my shabby treatment by Mr. Hale. He said, Well, Mr. Hale is what he is, and I guess we can go ahead and settle it up. I then told him that after leaving Mr. Hale's office, in Dana, and Mr. Hale's saying that he wouldn't have anything more to do about it, I told my father of it, and about all of the agreements, and that he advised me
169 to have nothing more to do about it; that is, for me not to come up there again, but to send the papers to him, and he would settle it; that I would do so. And I believe I did so the next day. I never heard anything more from the parties.

Int. 77. Will you refer to the stipulation in the agreement relative to making the product of the two parties to the agreement equal, and state what was done under that clause?

(Objected to as incompetent and immaterial.)

Ans. On our part we did send the orders to them. I have one in my mind in particular. It was a trade offered to us by Mr. Ladd, of Boston. This we turned over to them, and I think they accepted it. I think we have a letter from them to that effect. We have also had letters from parties, and inquiries personally, as to who made the best work, whether Mr. Hale or Mr. Stone. We always referred them to Mr. Hale's company; thought they could do the best there. We were anxious to have our two concerns do all the work.

Int. 78. State whether there was any agreement made at Greenfield as to your paying a part of the expenses of the extension of the Hale and Goodman patent, and if so, what the agreement was, and whether it was performed on your part.

Ans. I think the agreement was that we were to pay half of the expenses of the extension. They couldn't tell, at the time we were at Greenfield, just what the expenses were; but I think it was about $300. I believe we gave our check at that time for 150, and they sent a statement afterwards that it cost more than that. It appears by a letter from them, before referred to, that the sum was $467 35. We sent them half of the difference between the two sums.

Int. 79. You stated that you objected to the introduction of Mr.

Lindsay to the proposed company, after your return from Westfield. Will you state what your reasons were for objecting to him, and whether you assigned these reasons at the time to parties interested?

(Objected to.)

Ans. One reason was because it made more shares in the company, and made them smaller. The other was that I had formerly been in company with him, and he was not altogether satisfactory. I don't know whether I assigned the reasons, but I presumed they were understood at the time.

Int. 80. Have you been accustomed to operate the machines—I mean the Hale and Goodman machine, and the Oaks machine, and the Wheeler machine—represented by the model marked + ? and if so, for how long a time, and how much?

Ans. I have, the Hale and Goodman machine, most of the time for five years steadily. I have used the Oaks machine some, not very much, but enough to see the operation of it, and have used
170 the Wheeler machine about the same, at different times.

Int. 81. Have you seen different persons learn to operate the different machines? If so, state whether you have seen a considerable number of persons accustomed to use the machines.

Ans. I have seen quite a good many use the Hale and Goodman machine, and have learned them myself to use it. I have seen quite a number of different persons use the other machines. Have seen them used a good deal.

Int. 82. Will you state what is the relative amount of training or experience required in operators, to use the several machines successfully, and explain the mode of operating the machines?

Ans. Perhaps I had better give my experience when I first commenced using the Hale and Goodman machine. I let myself to my boss for fourteen dollars a month, for a year, with an agreement that I should have a chance to learn to use it during the year. Another man who didn't do as much work as I did got eighteen dollars a month. The difference in price was the consideration for allowing me to learn to use the machine. It was considered a difficult matter to learn to use them, to make good work. He didn't give me time enough during the week to learn. I finally used to take my stint, and finish it so as to have Saturdays, and then on that day I ran the machine for him for nothing, so as to learn to use it. The expression we used to have among our shop hands was, "that we had got to rub our belly and spat our forehead so as not to make any mistakes, before we could use the machine." In getting used to run the Hale and Goodman machine, when the rollers are let down upon the patterns, then the operation commences that both hands have to be in sympathy with each other; that is, that one is governed by the other. The mind has to be closely concentrated upon the work until the motions become familiar. The office of the right hand and of the left hand continually changes as the work passes along. For instance, as the rollers go down into a cut, it has to be determined by the left hand pretty much, how fast to let it down, and by the right hand how fast to drive the carriage forward. In coming up out of the curve it is necessary to

have both hands in sympathy, as one lifts gradually, and the other feeds the carriage gradually forward. After it gets over to what we call the straight or cone part of the leg, it is not so necessary to concentrate the mind closely, until it comes to another curve. It is necessary, when going against the grain of the wood or rising over a swell, to feed carefully with the right and ease it over carefully with the left hand, to prevent chipping or making patching. The whole motion of the machine is irregular, sometimes one hand moving fast and then the other. It takes some men a year and some six months to learn to use the Hale and Goodman machine so as to make
171 perfect work. They can learn to run a leg through in less time than this. I think it took me during the whole year, as I worked upon it, to learn to do good work. I worked on it on Saturdays, and several hours at a time, as my boss could spare me.

The Oaks machine is entirely different. The operator has nothing to do with the cutters while the planing is going on. After the leg has passed through, the cutters are lifted by the lever and held while the carriage is drawn back. I have known several men to sit down and do a very good day's work the first day on it. In the Wheeler machine, which is more simple than the Oaks, the operator has only to see or feel that the roller is up against the face of the pattern, and at the same time he passes the carriage by the cutter.

Int. 83. In running the Hale & Goodman machine, how is the operator guided in keeping the cutter down to the work, by the eye or by the feeling upon the hand?

Ans. He does it entirely by the sense of feeling upon the hand.

Int. 84. From your experience in operating that machine, what probability would there be, in your judgment, that a person would make good work upon his first trial in operating the machine?

Ans. I don't think it would be possible for a man to do it. If he did it, it would be entirely by accident.

Int. 85. Did you see the legs cut which have been produced by Mr. Peckham as exhibits in this case? If so, will you state how they compare with the legs cut on the Oaks machine or the Dana machine?

Ans. I have seen them, and they are cut much smoother than those cut on the Oaks or Dana machines; of about the same smoothness as those cut on the table machine.

Int. 86. What is your judgment as to the practicability of using machines like those with which these legs were cut, to do the work daily and continuously in such an establishment as yours or the one at Dana? Give your judgment as to each of the forms of machine used in cutting those legs.

Ans. From what experience I have had in running and seeing the different machines run, I should think these machines were decidedly the best, both in the quality of the work produced and the time saved in cutting it. I think that the fastest way to do the work is to pass the machine or frame A, either with or without those bars, over the cylinder. Without the bars and rollers it is harder work for heavy work, but with them I think it is the best way to do it.

Either way is entirely practicable, and with the bars to take the weight, it is a decided improvement over the Dana machine in every respect. The machine, as used with the carriage B, when passed under the cutter works easy and well, and is entirely practicable.

172 Int. 87. State what your judgment is as to its adaptability to all kinds or styles of work, and to the various patterns.

Ans. It will cut all kinds and patterns of work that any machine of this kind will cut.

Int. 88. In what manner do you have the cutting of legs done at your establishment; that is, is it done directly for you by men in your employment, or by contract?

Ans. It is done by contract, and always has been.

Int. 89. What prices do you pay for your work, and what is included in your contract?

Ans. I think it is 70 or 75 cents this year, but am not sure—my brother made the writings. The man that makes the legs takes the stuff from the kiln, dry, and does all the work, fitting them ready for veneering. He furnishes part of the tools and machinery. We furnish power and shop room and stock.

Int. 90. Who owns the leg machines in operation at your place?

Ans. George Stevens.

Int. 91. How long has he owned them?

Ans. I think it is about a year and a half, as near as I remember now. I think he has owned one for that length of time—the Oaks machine—and the other, the table machine, for about a year.

Int. 92. Have you ever owned the table machine?

Ans. I never have.

Int. 93. Since the last adjournment, have you made any examination or search for letters which you received from Mr. Allen Goodman, relating to the negotiations which took place at Greenfield? If so, and if you have found any, will you produce them to be annexed to your deposition, and state when they were received?

Ans. I made search in my files of letters, and this is the only one that I found from Mr. Goodman. The witness here produced the letter dated 20th, '60, a copy of which is hereto annexed, and marked Exhibit No. 1, H. F. S., com'r. We filed it March 20th, 1860, and I presume that was the time when it was received.

Cross-interrogatories:

Cross-int. 1. You say Mr. George Stevens has owned the Oak, machine for about a year and a half, and the other or table machine for about a year. From whom did he obtain the Oaks machine?

Ans. He bought it of us.

Cross-int. 2. Did you give him a bill of sale of it?

Ans. I think we did.

173 Cross-int. 3. Do you know whether you did or not?

Ans. My brother made the trade with him. I don't know. I think he did.

Cross-int. 4. How do you know it was about a year and a half ago? How do you recollect the time?

Ans. I don't know as I have any particular reasons for knowing. I recollect seeing a writing to that effect—and now I think of it, I think it was the bill of sale that I saw.

Cross-int. 5. Are you sure that the transaction did not really take place some time later, and the bill of sale dated back?

Ans. I am not sure about the date of the transaction. My impression is, that the date of the transaction and of the bill of sale were the same.

Cross-int. 6. Where did Mr. Stevens reside, and what was his business?

Ans. He resides in Westfield. His business is making piano legs for us.

Cross-int. 7. What was his business just previous to the transaction in question?

Ans. The same business.

Cross-int. 8. On what machine, if any, had he been making piano legs for you before his purchase, so called, of the Oaks machine?

Ans. On the Oaks machine.

Cross-int. 9. Did he make them for you on that machine before said purchase, so called, in the same manner and upon the same terms that he made them upon it afterward?

Ans. He made them on the same machine, but not on the same terms.

Cross.int. 10. On what terms did he make them before, and on what terms afterwards?

Ans. At first he made them for fifty cents per set, and we paid him once in three months. I believe this pay was increased the second year he worked for us. After the purchase, we took some of the work to do, and he bought this machine and some of the tools, and we paid him more for doing the work afterwards; how much I don't remember.

Cross-int. 11. What tools did he buy?

Ans. Some planes, chisels, and saws and bits, I believe.

Cross-int. 12. Don't you know what you have been paying him since this purchase, so called?

Ans. No, sir. We are paying more this year than we were the first year after the purchase, I believe. My brother has charge of the business in the shop, contracting there, &c., and I attend to the outside business. I mean my brother Horace C. Stimpson.

Cross-int. 13. Was any written contract made between your
174 firm and Mr. Stevens, providing for the terms upon which he should make legs for you, after his so-called purchase of your machine?

Ans. I think there was.

Cross-int. 14. Will you produce all the written contracts between your firm, or any member of it, and Mr. Stevens, relating to his manufacture of piano legs for you, and give us an opportunity of examining them?

Ans. I have no objections to doing so, if desired.

Cross-int. 15. Did Mr. Stevens, when he made this purchase, so

called, of machine and tools, pay your firm, or any member of it, any money or other property as the price?

Ans. I don't know whether he paid any money, or whether it was charged to him and taken out on settlement; probably the latter.

Cross-int. 16. Do you know what was so charged to him, if anything?

Ans. I do not.

Cross-int. 17. Do you know whether it was so charged at or about the time of purchase, so called?

Ans. I do not.

Cross-int. 18. Do you know that any such charge was made at all?

Ans. I do not. I said probably it was charged; that is the probable way of the transaction.

Cross-int. 19. Do you know what amount was so charged, if at all?

Ans. I do not.

Cross-int. 20. Will you examine your books, or cause them to be examined, so that you can state the date and terms of such charge, if any such was made?

Ans. I will.

Cross-int. 21. You say Mr. Stevens purchased the table machine about a year ago. Whom did he purchase it from?

Ans. Mr. Wheeler, I believe.

Cross-int. 22. Where do these two machines stand?

Ans. In our shop at Westfield.

Cross-int. 23. Do you charge Mr. Stevens shop room?

Ans. I think not.

Cross-int. 24. Who insures the machines, you or he?

Ans. I don't know that they are insured at all. We don't insure them.

Cross-int. 25. Does anybody else work on those machines except Mr. Stevens?

Ans. Yes.

Cross-int. 26. Some of your men?

Ans. No.

175 Cross-int. 27. Any men paid by you?

Ans. No.

Cross-int. 28. Are any legs made upon either of these machines except for your concern?

Ans. They are not.

Cross-int. 29. How many sets of legs a day will these two machines make respectively?

Ans. The largest day's work that I have had reported to me was forty-five sets on the table machine, and about thirty sets on the Oaks machine. This I should think was an extraordinary day's work for each of them.

Cross-int. 30. What, to the best of your recollection, is the average number of sets per day which have been made in your establish-

ment with the use of these machines, from the 7th of March, 1860, to the present time?

Ans. I have no means of knowing, and should guess very widely of the mark. Some days there are none at all cut.

Cross-int. 31. Will your books show how many sets have been cut on each day, or in each week, or in each month, since the 7th of March, 1860?

Ans. I don't think they will.

Cross-int. 32. Will they not show how many sets have been cut in all, since that time?

Ans. I think not.

Cross-int. 33. Have you no accounts from Mr. Stevens; rendered from time to time since that date, showing how many sets have been so cut?

Ans. I think not. I don't know of any such accounts.

Cross-int. 34. How often have you paid Mr. Stevens since he has been making legs for you, as you say?

Ans. Once a quarter.

Cross-int. 35. Do you pay him by the number of sets made during the quarter?

Ans. We do.

Cross-int. 36. You say Mr. Stevens renders you no accounts of the number of legs cut. Does anybody else keep such account?

Ans. Not that I know of.

Cross-int. 37. How do you know how much to pay Mr. Stevens?

Ans. To the best of my recollection, my brother pays him by the gross amount of work that he brings in at a time, for the work done.

Cross-int. 38. Does he bring it in at stated times, or as it happens?

Ans. I think he brings it in once in three months.

Cross-int. 39. Is he paid so much a set?

Ans. Yes.

176 Cross-int. 40. Then will not these quarterly payments to him show how many sets he has made during each quarter?

Ans. They may show it if they are kept. He does other work for us and brings in his accounts altogether. I don't know whether his account shows how much of it is for sets of legs or not.

Cross-int. 41. What other work does he do for you?

Ans. Whatever we have for him to do; sometimes one thing and sometimes another.

Cross-int. 42. How long has he been so employed by you as a job hand?

Ans. Ever since he has been with us, except the first winter, when he worked on veneers, either by the day or the piece, I forget which.

Cross-int. 43. How long has he been in your employ including said first winter?

Ans. I don't remember. I should think it was three years, more or less.

Cross-int. 44. Have you had during the last three years any, and how many job hands—that is, hands doing what work was given them to do and getting their pay by the piece, besides Mr. Stevens?

Ans. We have. It would vary from three to thirty at a time.

Cross-int. 45. Can you state what proportion of Mr. Stevens's job work was leg cutting, and what proportion was other job work, during the last year and a half, on an average?

Ans. I don't think I can. I am not familiar with the shopwork, as my brother is. It may be one-half or three-quarters or more. My brother sets him to work as he chooses.

Cross-int. 46. If I understand you correctly no legs have been cut upon either of those machines during the last year, in one case, and year and a half or thereabouts, except by Mr. Stevens, and hands employed and paid by him? Is that so?

Ans. I believe it is.

Cross-int. 47. Are they hands who are engaged at other work in your shop, for you, when not assisting him?

Ans. They are.

Cross-int. 48. Are you able to say that the so-called purchase of the Oaks machine by Mr. Stevens was more than fifteen months ago? and if so, how do you know?

Ans. I am not able to say.

Cross-int. 49. Are you able to say it was more than twelve months ago?

Ans. Yes, I think I am.

Cross int. 50. Has your establishment turned out as much as one hundred and fifty sets of legs per week, on an average, since the first of January last?

177 Ans. I don't think we have.

Cross-int. 51. Have you turned out as high an average as that per week, in any year since the seventh of March, 1860?

Ans. I should think not.

Cross-int. 52. Do you think you ever turned out as many sets as that in any one week since the seventh of March, 1860?

Ans. I should think we had.

Cross-int. 53. Do you think you ever turned out as much as one hundred and eighty sets in any one week?

Ans. I believe we did, one week.

Cross-int. 54. Do you remember about when that was?

Ans. Some time this summer.

Cross-int. 55. Do you think that you cleared in your business, between the seventh of March, 1860, and the seventh of March, 1862, as much as fifteen thousand dollars?

Ans. I don't know anything about it.

Cross-int. 56. Business has been better, has it not, in the two years succeeding the seventh of March, 1862, than in the two years preceding that date?

Ans. It has.

Cross-int. 57. For how many months do you think you went on making returns, and otherwise carrying out the agreement of the seventh of March, 1860? State according to your best recollection.

Ans. I don't remember. I have no recollection about it.

Cross-int. 58. State whether you believe it was one, two, three, four, five, or six months.

Ans. My impression is that it was six months, or more. It may be more, or it may be less.

Cross-int. 59. State according to the best of your recollection, how many sets of legs your establishment turned out per week, on an average, in the two years next succeeding the seventh of March, 1860.

Ans. I have no recollection about it.

Cross-int. 60. Do you believe you turned out as much as one hundred and twenty-five sets per week, on an average, during that time?

Ans. I do not.

Cross-int. 61. Please look at the letter now shown you, and say if you know who wrote it?

Ans. I think I wrote it myself. (The letter shown to the witness read as follows:)

178 WESTFIELD, *April 6th*, '63.

Mess. W. Hale & Co.:

GENTLEMEN: Yours of 30 M'ch is at hand. We recognize entirely in patent rights, a property which shall be respected; and we have no disposition to infringe upon any patent right which actually belongs to you. We will at once take measures to inform ourselves in the matter, and write you again, or see you in regard to it.

Respectfully,

(Signed) STIMPSON & CO.

Cross-int. 62. Please look at the letter now shown you, and say who wrote that.

Ans. I should think I wrote that. (The letter shown to the witness read as follows:)

WESTFIELD, *May* 6, '63.

Messrs. W. Hale & Co.:

GENTS.: Yours of 5th is at hand. In answer, would say that we saw W. Hale in New York, and he told us he had commenced a suit at law on us. Consequently we made other arrangements about machinery that we can't well countermand. We wrote you April 6th, that we had no disposition to infringe any patent rights that actually—that we would take measures to inform ourselves at once, which we did—but have not as yet received the papers, (all of them,) but shall next week without doubt. Supposing from what he said you intended to act hastily, we were compelled to take the course we did.

Please state by return mail whether you will meet us at Erving, at Stone's, any time soon, or any other place. We are prepared to submit for your consideration four reasons why we are all of us selling our work lower than we can afford. If we come to no agreement, it will do no harm to talk it over, as we may learn something we don't *now* believe. Stone is anxious to do so. If you have any reasons

why you don't want to meet at Stone's, or see him at *first*, say so. Please reply at once, as we may be away from home.

Respectfully,

(Signed) STIMPSON & CO.

Cross-int. 63. Please look at the letter now shown you, and say who wrote that.

Ans. I think I wrote it. (The letter shown to the witness read as follows, viz:)

179 WESTFIELD, *March* 13, 1860.

Messrs. Warren Hale & Co.:

GENTS.: Yours of the 9th is at hand. In answer would say we think Wheeler will trade with you at your offer yet. Let him keep his machine, and run it if he dare; tell him you will sue him for what he has run it. Don't take it off his hands, and also let him keep his privilege of water and land; also let him get up his jobs for work, and tell him he will be very careful not to get up anything that will infringe on your patent. Talk to him in that kind of way, and we think he will come over. He can't do better, and he knows it, than you offer. He has no plank to make legs with of any account. Then again, we feel that we offer all we can afford for only two years, and the machine is good for nothing to us. We don't want it to use; you have it for seven years; still we are willing to be our part in anything, but he ought not to have any more than your offer, and think he will yet come to it; he will miss the mark if he don't.

About the expenses of obtaining patent, we had understood it in all of our talks and consideration to be $500, and thought we paid all we agreed to paid; however, we are willing to do the fair thing, and will let it be until we see you; shall be up soon; will then give our prices We think we are above yours, especially on N. York table work. We sell mostly all customers at regular prices. except Dunham, Knohl & Co., and those you know. We sell Chickering same as J. S. & Co. did. We told you mostly our prices when we saw you; will give you one of our sketches and prices marked, and you can do the same. We raised on Worcester fifty cents per set. We think he won't order of us. You had better write him, or see him soon.

Yours, truly,

STIMPSON, OAKS & CO.

P. S.—After writing the above we received a letter from H. Worcester saying we might fill his order at the advance price, which is now $3 50 per set, cash; so you see we can bring them into line if we try. Now you might try it on to the New York table makers on fancy woods.

Cross-int. 64. Please look at the letter now shown you, and say who wrote that.

Ans. I think I wrote it. (The letter shown to the witness read as follows:)

WESTFIELD, *May 11th*, 1860.

Messrs. Warren Hale & Co.:

GENTS.: Do you intend to let us have the leg machine, and take the Ladd piano and the melodeon here? Please inform us at once, as we shall dispose of the piano if you do not at once; it is at Winchester. How much work did you get off in April? Ours was $2,200 nearly. Please answer.

Yours, truly,

STIMPSON & CO.

180 Cross-int. 65. Please look at the letter now shown you, and say who wrote that.

Ans. I did. (The letter shown to the witness read as follows:)

WESTFIELD, *May 1st*, 1863.

Messrs. W. Hale & Co.:

GENTLEMEN: What will you take for the machine you bought of Wheeler, and the right to run it? On receipt of your answer we will call and see you about it, also about the price of legs; you are selling much less than you need to, and less than we are. There will never be a better time probably to raise the prices than the present, and we think it is a necessity, as the prices are too low.

Yours, &c.,

(Signed) STIMPSON & CO.

Cross-int. 66. Had you any knowledge of the piano and melodeon leg manufacture prior to the year 1845?

Ans. I had not.

Cross-int. 67. Have you any knowledge of the cost, &c., of making piano and melodeon legs by jig-sawing them out and fitting the legs to the cauls by hand?

Ans. I have not.

Cross-int. 68. Was the arrangement between your firm and Hale & Goodman, about the 7th of March, 1860, in regard to the leg machine then owned by Lyman Wheeler, made in the course of the same negotiation or discussion as the other matters which were inserted in your written agreement of that date? If not, upon what different occasion was it made?

Ans. I believe it was made on that occasion, part of it, if not all; I think the whole.

Cross-int. 69. Have you the bond which you, with the other persons you have named, gave to Loomis, Lewis & Co. for the purchase of the Westfield property, and which, upon the completion of that purchase, was or should have been returned?

Ans. I don't know whether we have it or not.

Cross-int. 70. Have you any bond or agreement or other written instrument which passed between you and Loomis, Lewis & Co. in regard to that transaction?

Ans. I don't know whether we have or not.

Cross-int. 71. Will you search for such papers, and produce them if you can?

Ans. I will.

181 Examination closed excepting so far as relates to examination upon the exhibits called for.

BOSTON, *January* 30, 1865.

The witness stated that he had made careful search for the papers called for on the cross-examination, and had been unable to find them, and was fully satisfied that he should not be able to find them by any further search which he might make, and thereupon the deposition was closed and signed by the witness on the date above named.

CHAS. N. STIMPSON.

Exhibit No. 1.—*H. F. S., com'r.*

NORTH DANA, 20*th*, '60.

Mr. Stimpson:

DEAR SIR: Yours of the 17th inst. is just received. As to Mr. Wheeler's talk with you, it is in part true. As to binding Wheeler not to sell blocks to you, we do not wish to, but when we were asking W. questions what he would bind himself to, I asked him, with the rest, if he would bind himself not to sell you blocks, and he said yes, and we went on with the agreement, and got it nearly closed, and there was not a word about the blocks in the writing. I did it to make him think we were at variance with each other. Mr. W. said that he would take nine hundred dollars in cash, or that he had as lives have 900 in cash as to have what we had offered him. We offered him two pianos, or we would give him five hundred dollars worth of pianos, or we would let him have them at what they cost, as he was very particular about the pianos. We offered him one of Newhall and one of Vose; those he said that he would take, and he was to have them at cost, and he said he thought there was some ketch about it, because we could not tell him what the cost would be, and the trade was given up. We agreed on the other five hundred dollars.

Yours, truly,

ALLEN GOODMAN.

I will try to inform myself about the sales of legs for the future; I have not looked after that part of the business much. We offered Wheeler all he asked us before we met at Greenfield. We shall not do any better with than what we have offered. W. says that he can build a machine and sell it for five hundred dollars to a man in Orange, and he says, furthermore, that he shall build a machine, at any rate, if we do not trade with him. W. feels or talks as he could do considerable, but I think there is some gas, and I do not know but it will take fire, although I do not believe it; if it does, there will be quite an explosion.

182 *Deposition of William N. Oaks.*

JANUARY 26, 1865.

Int. 1. Have you before given your deposition in this case?

Ans. I have.

Int. 2. Did you have a contract in Dana for veneering pianoforte legs? If so, state with whom it was, and the time when the contract was made.

Ans. I did; I made the trade with Charles N. Stimpson. At this time Stimpson & Doane divided their veneering work, and I contracted to do the Stimpsons' share of it; I should think it was about 1852 or '53.

Int. 3. Who did the veneering before that time?

Ans. Mr. Nelson Bosworth.

Int. 4. State, if you know, the prices which were paid to Mr. Bosworth for veneering legs, the prices which were paid to you under the contract, and the prices which were paid after the termination of the contract.

Ans. I did know at the time what Mr. Bosworth had; I couldn't give the prices now exactly. The prices he had ranged from $3 to $8. For one or two patterns he got $8; I had from $1 50 to $3. After the termination of my contract the work wasn't let out by the contract; it was done by the piece.

Int. 5. How long did your contract continue?

Ans. About eighteen months.

Int. 6. Did the prices which you have named include the veneers, glue, &c., or only the labor?

Ans. Only the labor.

Int. 7. Were you present yesterday at the examination of Charles S. Chamberlin, and was Mr. Allen Goodman also present?

Ans. I was; I am not positive that I was all the time. Mr. Goodman was there while I was; I think all the time, but am not positive; am sure we were both there when he got through.

Int. 8. If, after Mr. Chamberlin's testimony was concluded, Mr. Goodman said anything to you about Mr. Chamberlin's testimony, will you state what it was?

Ans. He said, I believe, that Mr. Chamberlin didn't tell the whole story; in regard to a conversation that Mr. Chamberlin and Mr. Goodman had had in reference to the Mr. Stimpsons, he said that Mr. Chamberlin did not give the reasons why he said he didn't blame them for not going into the company; he said that het old Chamberlin, the reason was because they had taken in Mr. Lindsay, and made one more share, and Mr. Lindsay was a man that they wouldn't like to go in company with, or he or I, (as he expressed it.)

(Answer objected to.)

183 After the purchase at Westfield, and before the agreement was made at Greenfield, if Mr. Goodman had any conversations with you relative to going to Westfield to go into that concern, state what they were, and where they occurred.

(Objected to as not proper on the second examination, and generally.)

Ans. We had some conversation on the subject, I think, at Dana, and also, I think, at Westfield. After we had given up the idea of putting the two together, Mr. Charles N. Stimpson and myself saw Mr. Goodman, at Dana. We had some conversation on the subject, thinking that we might possibly get the two concerns together in some way then. Mr. Goodman said that he didn't suppose that Mr. Charles N. Stimpson and Mr. Warren Hale could ever do business together. He thought they were not friendly enough to be partners. Then we asked Mr. Goodman to go in with us at Westfield. He said that he was in there then, at Dana, and that he couldn't do anything as long as he had an interest there; but if he could sell out his interest there, he thought he would come out there and go in with us. We had another talk at Westfield, afterwards. Mr. Goodman and Mr. Hale came to Westfield to see about arranging prices of legs, and we made the same proposition to Mr. Goodman, at that time. He gave us the same answer. I think we had another conversation after that, at Dana, but I am not positive.

Int. 10. How long was Mr. Goodman at Westfield, at the time you refer to, and with whom did he stop?

Ans. He was there two or three nights. He stopped at my house one night certain, and at Mr. Charles N. Stimpson's one night.

Cross-examination:

Cross-int. 1. (De bene.) I infer from your testimony that you and Mr. Stimpson desired to get Mr. Goodman into the Westfield concern. Am I correct in this inferrence?

Ans. I think you are. You are, on my part, at any rate.

Cross-int. 2. (De bene.) I suppose I may infer that you were very anxious without being incorrect?

Ans. I think you are incorrect.

Cross-int. 3. (De bene.) Perhaps you were very desirous then?

Ans. I think not very.

Cross-int. 4. (De bene.) Would not Mr. Goodman have brought into your concern one-half of the Hale and Goodman patent?

Ans. I think not. He wouldn't, that I was aware of.

184 Cross-int. 5. (De bene.) Please give us your real reason for desiring to get Mr. Goodman into the Westfield concern.

Ans. My reason was, I liked him as a friend. I considered him a good mechanic, and knew that he understood the business. That was Mr. Stimpson's reasons, as expressed to me.

Cross-int. 6. (De bene.) What share was he offered?

Ans. I think there was no positive offer made to him, but am not positive, however.

Cross-int. 7. (De bene.) When was this subject first spoken of between yourself and Mr. Goodman? State as exactly as possible.

Ans. I should think that the conversation I first referred to was some five or six weeks after we commenced running at Westfield, and that, I think, is the first conversation I had with him, but am not positive.

Cross-int. 8. (De bene.) Is Mr. Goodman a better mechanic and better acquainted with the business than yourself, and Warren, and Charles N. Stimpson?

Ans. Perhaps I shouldn't be a judge of myself. Neither of the Messrs. Stimpson, at that time, I don't think, had had as much experience in the mechanical part of the business as Mr. Goodman.

Cross-int. 9. (De bene.) Please state what month, and in what part of the month, five or six weeks after you commenced running the Westfield concern is?

Ans. Some time in the fore part of October, I should say.

Cross-int. 10. (De bene.) Search your memory carefully, and tell us whether you are willing to swear that your real purpose for desiring to get Mr. Goodman into your concern was not to thereby obtain an interest in the Hale and Goodman patent?

Ans. That wasn't my purpose. I didn't expect to get it if I got him. I supposed then that the patent was owned by Warren Hale and company, and if he sold his interest in the concern, that that would go with it, as a part of the interest. I think that is the way the shares have always been sold in that concern.

Cross-int. 11. (De bene.) Are you willing to swear that you did not endeavor to dissuade Mr. Goodman from becoming a member of the firm Mr. Hale was about to make?

Ans. I wasn't aware that Mr. Hale was about to make any firm.

Cross-int. 12. (De bene.) Last question repeated.

Ans. I am.

Cross-int. 13. (De bene.) Are you willing to swear that you did not either alone or with Mr. Charles N. Stimpson or others, do
185 all in your power to prevent Mr. Goodman from making arrangements with Mr. Hale, or Mr. Hale and others, to manufacture piano legs under the Hale and Goodman patent?

Ans. I am willing to swear that I didn't do anything, and I don't know of anything that I endeavored to do.

Cross-int. 14. (De bene.) Then you do swear that you did not endeavor in any way, by word or deed, to prevent Mr. Goodman from making arrangements with Mr. Hale for the manufacture of piano legs under the Hale and Goodman patent?

Ans. I dont know that I endeavored to do anything, or said anything.

Cross-int 15. (De bene.) Will you swear that you never advised Mr. Goodman not to put in his part of the patent?

Ans. I never took the liberty to advise Mr. Goodman anything about what to do with his patent.

Cross-int. 16. (De bene.) Didn't you have some such talk as that with Mr. Goodman, speaking in a friendly way, and not as an adviser?

Ans. I don't think I did. I understood, and supposed, and don't know anything to the contrary now, that it was put in.

Cross-int. 17. (De bene) You know there was a time, don't you, when there was some misunderstanding or trouble between Mr. Hale and Mr. Goodman as to Mr. Goodman's putting in his share of the patent?

Ans. I don't recollect of ever knowing of such a time.

Cross-int. 18. (De bene.) Did you ever hear Mr. Charles N. Stimpson ask Mr. Goodman what he considered to be the value of his (Goodman's) share of the Hale and Goodman patent?

Ans. I don't think I ever did.

Cross-int. 19. How did you and Mr. Charles N. Stimpson go from Westfield to Dana, after the visit there of Mr. Fales and Mr. Johnson and Mr. Lindsay, and who went with you?

Ans. I couldn't say how we did go. I am inclined to think now that I went with a horse all the way. I kept a horse and went several times with it, but am not positive about it. Upon further reflection I think I didn't go with the horse at that time.

Cross-int. 20. Don't you recollect going to Warren in the cars with Mr. Charles N. Stimpson, and part of the way with Mr. Fales, and taking the stage at Warren and going over to Ware, and spending the night there with Mr. Phipps, Mr. Stimpson's father-in-law, and being driven over by him to North Dana?

Ans. I recollect of going that route, but I shouldn't think that we stayed over night there. I don't think it was at that time, but
186 it might have been.

Cross-int. 21. How far is it to Ware from North Dana?

Ans. About fifteen miles, I believe, they call it.

Cross-int. 22. What time did you leave Westfield on the occasion referred to?

Ans. Not far from noon.

WM. N. OAKS.

Deposition of Laura E. Oaks.

JANUARY 26, 1865.

Int. 1. Are you the wife of William N. Oakes, of Norwich, Conn.?

Ans. I am.

Int. 2. Who is your father? and where did you reside about the years 1841, 1842, and 1843?

Ans. Amasa Chamberlain. I resided at that time in Wendell, Mass.

Int. 3. How old were you at that time?

Ans. Thirteen years old.

Int. 4. Did Mr. Lyman Wheeler live there at that time, either in your father's house, or in another?

Ans. He did part of the time, in my father's house.

Int. 5. What relation was Mr. Wheeler to you?

Ans. Brother-in-law.

Int. 6. While he resided there, did you know of his making chisel and knife handles, or similar articles?

Ans. I did.

Int. 7. Will you state whether they were round handles, or flat-sided, and whether or not he made them by machinery or by hand?

Ans. They were flat-sided, very much like the one now shown me in the exhibit, and marked Wheeler No. 3. He made them by machinery.

Int. 8. Have you a recollection of that machinery, and how it looked?

Ans. I have.

Int. 9. Will you look at the model marked Wheeler No. 5, and state how far that corresponds with the machine he used at Wendell, for making handles?

Ans. Very correctly, I think.

Int. 10. Have you any recollection of seeing him use it? and if so, how often? and did you ever see any person assist him in using it, and if so, whom, and what assistance did he give?

Ans. I have seen him use it every day or two. I have seen my father assist him in using it. He turned with his foot the treadle of the foot-lathe.

187 Int. 11. Have you any recollection of Mr. Wheeler's making handles for a set of knives which were used in your family? and if so, how long were they used, and were they flat-sided or round?

Ans. I have. They were used for some time, and were flat-sided.

Int. 12. Do you recollect seeing Mr. Wheeler use a frame like that marked Wheeler No. 3, for making handles, by holding it in his hand, and passing it over the cutter in the latter?

(Objected to.)

Ans. One very much like it. I am not acquainted with machinery much.

Int. 13. If you recollect anything that he said about manufacturing any article of furniture or cabinet ware, in such a machine, will you state what the circumstances were which led to his talking about it, and what he said?

Ans. He had a bureau that had round posts in front. He said when he made a machine large enough, he would make a different pattern of post.

Int 14. After he removed to Greenwich, did you visit him there?

Ans. I did.

Int. 15. If you remember what he said about his machine, and one which he had seen at Dana upon one occasion when he returned from Dana, will you state what it was?

Ans. He said they had got his machine patented, and were using it there, or one made in the same way.

Int. 16. If he stated what they were using it for, and who was using it, or had got it patented, state what he said.

Ans. He said they were making piano legs. He said Mr. Goodman had got it patented.

Int. 17. If he said anything about a patent on his own machine, or about not getting one, state what it was.

Ans. He said he might have got one himself if he had had means.

Cross-interrogatories:

Cross-int. 1. When was this talk between you and Mr. Wheeler?

Ans. It was soon after he moved to Greenwich. I think it was in the winter. I don't think I can fix the year. I haven't anything to fix it by now.

Cross-int. 2. Will you say, if you please, whether it was eight, ten, twelve, or fourteen years ago, or longer?

Ans. It was longer than fourteen years.

Cross-int. 3. How much longer, as nearly as you can recollect?

Ans. From eight to ten years longer, and might have been more.

Cross-int. 4. What was the shape of those knife-handles; were they not of the ordinary shape of knife-handles?

188 Ans. I don't think I ever saw any like them before. I can't describe them. I should know them if I was to see them.

Cross-int. 5. How many sides had they?

Ans. Some of these handles had the corners cut off, and perhaps you might call them eight-sided.

Cross-int. 6. What circumstance fixed Mr. Wheeler's talk with you in your recollection?

Ans. He had said a number of times that he meant to get his machine patented, and he was speaking to his wife about it.

Cross-int. 7. What kind of posts were those you have spoken of? I mean their shape and length.

Ans. About two feet long; and these were round.

LAURA E. OAKS.

Deposition of Amasa Dexter.

JANUARY 26, 1865.

Int. 1. Have you previously testified in this case?

Ans. I have.

Int. 2. In your answers to the cross-interrogatories, in your former deposition, you described a machine which you had seen in Mr. Wheeler's shop, in Wendell. Will you look at the model marked Wheeler No. 5, and state how far that corresponds with the machine which you saw in Mr. Wheeler's shop, and which you referred to in your previous deposition?

(Objected to.)

Ans. That agrees as near as my recollection will serve me.

Int. 3. In your answers to the eighteenth and nineteenth cross-interrogatories in the previous deposition, and in your answer to the twenty-second cross-interrogatory, you refer to a screw as being used to raise and depress the carriage; will you look at the model and state if you find in it what you understood to be a screw? and if so, state what it is.

(Objected to.)

Ans. I find a spiral spring in the model, under the end of the carriage. I had it in my mind that this was raised and lowered by a thumb-screw.

Int. 4. What is your recollection now as to whether the model now before you correctly represents the machine you saw in Mr. Wheeler's shop, as respects the method of raising and lowering the carriage?

(Objected to.)

Ans. It is correct as near as I can recollect. I can't be positive on that point. That is the best of my recollection.

189 Cross-examination:

Cross-int. 1. Do you mean to be understood that you now recollect that the carriage you referred to in your former deposition was raised and lowered by a spring?

Ans. I do not. I am not positive.

Direct resumed:

Int. 1. Do you mean by your last answer to vary your answer to the last direct interrogatory?

(Objected to.)

Ans. I do not.

Int. 2. Do you mean to say anything more than that you are not positive?

(Objected to.)

Ans. No, sir, I do not.

AMASA DEXTER.

Deposition of William Holt.

JANUARY 26, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. William Holt; age 54 years; I reside in New Salem, Mass.; I am a millwright by trade.

Int. 2. Where did you reside in the summer and fall of 1844, and for whom did you work?

Ans. I resided at North Dana. I worked part of the time for myself, and part of the time for Mr. Warren Hale.

Int. 3. Did you know of Mr. Warren Hale and Mr. Allen Goodman being engaged at that time in getting up a machine for planing pianoforte legs? and if so, state how you knew it, and whether you saw the machine, either while it was in process of construction, or after it was completed.

Ans. I did. I had considerable conversation with Mr. Hale before he began to work upon it, in regard to the machine. It is so long since, I couldn't tell whether I saw the machine while he was building it or not. I think I did, but wouldn't say that I did. I saw it after it was completed.

Int. 4. Did you see it in operation?

Ans. Yes, sir.

Int. 5. How many men did it take to run it?

190 Ans. I don't recollect particularly; but I think but one.

Int. 6. If, while the machine was being constructed, you had any conversation with either Mr. Hale or Mr. Goodman about any other machine for planing irregular work, state what the conversation was, as nearly as you can; and if any machine was described, give the description as nearly as you can.

Ans. I presume we had considerable conversation, but I don't recollect anything particular, except that one of them told me he saw a machine in North Royalston for planing chair backs and legs for Grecian chairs. As near as I could learn from the description, there was a cylinder cutter, and they run the leg over it by hand. Whe-

ther they had a pattern I couldn't state positively. It is so long since, I have forgotten.

It. 7. Which one did you have this conversation with?

Ans. I wouldn't say for certainty. I had the most conversation with Mr. Hale.

Cross-examination waived.

WILLIAM HOLT.

Deposition of Charles S. Chamberlin.

JANUARY 25, 1865.

Int. 1. State your name, residence, and occupation.

Ans. My name is Charles S. Chamberlin; residence, Westfield; have been engaged in the grocery business until quite recently, but am now in the piano leg business.

Int. 2. Have you ever given your deposition in this case before?

Ans. Yes, sir.

Int. 3. Have you any knowledge of a purchase of the Westfield property, by parties in this case and others?

Ans. I knew at the time they went to make the purchase.

Int. 4. How did you know it?

Ans. I was at work for Mr. Oaks at the manufactory now carried on by Hale & Co., in North Dana, he being one of the parties that bought out the concern at Westfield. He told me of it.

Int. 5. Did you, at or about the time of the purchase, have any conversation with Allen Goodman relative to said purchase, or to the patents or machines to be embraced in the purchase?

(Objected to.)

Ans. I did.

Int. 6. State as nearly as you can when and what that conversation was.

191 Ans. It was at the time they were out making their purchase. This was the first that I knew that their business was to buy the concern at Westfield. Speaking in regard to the machine of Mr. Oaks, as to its being an infringement on the Dana machine, I somewhat had my doubts as to the Oaks machine being a good patent, on account of both machines cutting the leg by a pattern. I said this to Goodman, and he replied, and said, it couldn't be any infringement, and gave as his reasons, that the Dana folks claimed that their patent rested upon the pattern being of the shape of the leg, and that Oaks's patterns were no more the shape of a leg than a hoe handle. I think these were the words used; and that there wasn't one in fifty that would know what the patterns were.

Int. 7. What Goodman was this?

Ans. Mr. Allen Goodman.

Int. 8. State whether or not, after the preceding conversation with Goodman—(The witness here interrupted and said, There is one thing which I omitted to state in my answer to the sixth interrogatory; that is, that he, Mr. Goodman, spoke of the Oaks machine as being superior to the Dana one, for the reason that the cutters would go

over the sharp corners of the leg without difficulty) you had a further conversation with said Goodman, relative to the Stimpsons carrying on business at Westfield.

Ans. I did.

Int. 9. State when and what the last-mentioned conversation was. (Objected to.)

Ans. It was awhile after the purchase, after they had tried to negotiate and bring things to a better state of feeling. He said he didn't blame Stimpson; that they, Stimpsons, had offered everything reasonable to have it settled, and wanted to get out of it, but they had got the property on their hands, and had got to do something with it. And further—I can't recollect exactly the language used—that if he, Goodman, could get out of it himself, where he was, he might buy in a share, and go into with them, the Stimpsons, himself, and that he had had a talk with Oaks several times, of making legs on their own hook, his and Oaks's, starting a shop, as Oaks had reserved a shop right of his patent.

Cross-examination waived.

CHARLES S. CHAMBERLIN.

192 *Deposition of Orason Powers.*

JANUARY 26, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. Orason Powers; am 29 years old; I reside in New Salem, Mass.; I work at blacksmithing and mechanical work.

Int. 2. Are you a son of Rufus Powers, of Prescott?

Ans. I am.

Int. 3. Do you recollect seeing a machine in your father's shop similar to the model marked Powers No. 2? If so, state how long you have known it to be there, when you last saw it, and how nearly it corresponds with the model.

Ans. I have seen it ever since I can recollect anything. I saw it last some time last spring, I think; can't say what month it was. The first I can recollect of his using those cutters for was for work on sash. I remember his making a sash for my aunt in 1844. I remember punching the mortises in that sash and carrying it to my aunt. I can't fix any earlier date than that. I should think the machine was about the same thing as the model; I don't see any material difference.

Int. 4. Will you look at the index on the model and say how that corresponds with the machine as it was in 1844, or when you first remember about it?

Ans. I think it is the same; I don't see any alteration. The carriage has been laying round, and the top part of the index end of the carriage has got split off. I don't know how long ago it was split off.

Int. 5. Will you state whether your father made any other machines for planing irregular work; if so, how many, and what work were they used for?

Ans. He made two other machines; one of them he used for turning spokes altogether. He could turn axles or any such thing on the same machine, but he used it for spokes. This was the first machine

of those two. The other one was a larger machine. He turned spokes and cut out piano legs on the same machine. With the large machine he turned five spokes at a time, I think.

Int. 6. Will you look at the model marked Powers No. 1, and say how far it corresponds with the first of these two machines?

Ans. The only difference I see is that the ratchet and pawl was in the middle of the carriage instead of being at one end.

Int. 7. When you speak of seeing the first machine, represented by the model marked Powers No. 2, used in 1844, do you mean to be understood that that is the earliest time you saw the machine, or the earliest time you saw it used?

(Objected to.)

193 Ans. That is the earliest I have any recollection of seeing it used. I couldn't state positive whether I saw it previous or not. I suppose I did if it was there. I saw everything there was in the shop.

Cross-examination:

Cross-int. 1. How old were you at that time?

Ans. I must have been nine years old.

Cross-int. 2. Please describe fully and particularly how that machine was used for making sash.

Ans. I don't know as I could describe. The carriage in the machine was not used, but only the table and the cylinder, with a different shaped knife. I don't think I could describe positively how it was used.

Cross-int. 3. What is your earliest recollection of seeing the whole machine used?

Ans. I don't remember that I have seen the carriage used before last spring, I think.

Cross-int. 4. What was it used for then?

Ans. I saw them cut out some white pine pieces, some inch board, I think, on one side in the form of a leg like the exhibit marked Powers No. 4.

Cross-int. 5. Who were present then?

Ans. No one except my father and myself.

Cross-int. 6. Do you know whether your father ever built more than one machine like Powers No. 2?

Ans. No other that I know of just like that.

Cross-int. 7. Do you know whether he ever built any other machines for planing irregular forms except the three you have mentioned?

Ans. He never finished any others that I ever knew of. He has the frame part; I mean the table and the cylinder of another one.

Cross-int. 8. Did he make a separate table and cylinder for each of the two machines last made, or did he use the same table and cylinder that he used in the first machine?

Ans. He used the same table and cylinder, making the necessary changes for the carriages shown in the exhibits marked Powers No. 1, and No. 2.

Cross-int. 9. How did those two machines last made by him differ, if at all, from each other? State fully.

Ans. The one shown in the exhibit marked Powers No. 1 had the carriage shoved through by hand. In the other large machine the carriage was driven by a rack and pinion.

Cross-int. 10. When was this large machine made?

194 Ans. I couldn't say when it was. I know who made it. Warren Hanson made the wood work.

Cross-int. 11. How long was it after that sash was made for your aunt?

Ans. I couldn't say. I think it was made some fifteen years ago, but wouldn't be positive.

Cross-int. 12. When was the top part of the head-piece or index end of the carriage broken off?

Ans. I couldn't tell when. When I saw it last spring it looked as if it had been split off a good while.

Cross-int. 13. What kind of wood was the head-piece of this carriage made of?

Ans. I wouldn't say certain. I think it was maple.

Cross-int. 14. What kind of a split was it, straight or crooked, and were the edges left rough or smooth?

Ans. I couldn't positively say, but I think it was nearly straight across, one end being higher than the other. It wasn't as smooth as if it had been planed.

Cross-int. 15. How did the shape of this head-piece differ from the shape of the foot-piece, when you last saw the carriage?

Ans. I think he had planed the head-piece off where it was split off level, or nearly level, with the carriage. I can't say how near alike they were, as I didn't take so particular notice of that as did of the work.

Cross-int. 16. Did you ever see another carriage like that one on the machine, like Powers No. 2, in your father's shop?

Ans. Not just like it. I saw the carriages on the Powers No. 1, and the other machine like it.

Cross-int. 17. How many teeth did the ratchets on the machines like Powers No. 1 have?

Ans. I couldn't tell how many.

Cross-int. 18. Were they similar to the ratchet shown in the exhibit Powers, No. 1?

Ans. I should think they were.

Cross-int. 19. Where have you lived since you came of age?

Ans. I have lived in Prescott, New Salem, and one year in York State.

Cross-int. 20. How many holes were there in the head-piece of the carriage of the machine like Powers No. 2, when you last saw it?

Ans. I couldn't say.

Cross-int. 21. The top of it, where it had been split off, had been planed, had it not before that time when you last saw it?

Ans. I think it had.

ORASON POWERS.

195 *Deposition of Benjamin N. Bullock.*

JANUARY 25, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Benjamin N. Bullock; age, forty-eight years. I reside in Leicester, Mass.; and am a machinist.

Int. 2. Are you acquainted with the parties to this proceeding? If so, when and how did you become acquainted with them?

Ans. I am. I became acquainted with them some sixteen years since. I moved into North Dana, and became personally acquainted with them.

Int. 3. Were you or not ever employed by them, or any of them, in any capacity? If yes, when and how?

Ans. Yes. I was employed in more than one capacity, as I used to do a good deal of machine work for them. I also was employed to assist them in a patent suit against one Brooks, in New York. I acted as a witness, and also as a semi-agent for them. This was some fourteen or fifteen years since; and I was so employed for some eighteen months, or two years.

Int. 4. State the circumstances under which you came into said last-named employment, and what you did in pursuance thereof.

Ans. Mr. Hale and Goodman wished me to go to New York with them, to act as a witness, and to obtain a view of Brooks's machine, which they considered infringed their patent. I went with them, and obtained a view of that machine, and altered another model over to be a model of Brooks's machine.

Int. 5. Did you or not, while such agent, have any conversation with Warren Hale and Allen Goodman in relation to the Hayward machine, so called? If yes, state when and what such conversation was.

(Objected to.)

Ans. The first conversation was after we started to go to New York together. There were three of us in a buggy together. The conversation was on the point of the similarity of the Hayward machine and the Goodman leg machine. This conversation was in reference to the similarity of the machines. The cutters and swing which raises and falls them were alike in the two machines; and the backward and forward motion of the carriage which carries the patterns and work. There, too, was a similarity. The principal points of difference were that the Hayward cut one side of the stuff at a time, and did not revolve it. In the Goodman they cut one side, and then revolved and cut another side, as many squares as they wished without removing the work from the machine. Another dissimilarity was in a difficulty they had to obviate in the Goodman machine, of getting over sharp curves and a sudden rise, nearly perpendicular sometimes. The Hayward machine did not need any mechanical

196 contrivance for that purpose, because it runs in gradual curves. This difficulty was obviated in the Goodman machine by the lifting gear, to raise up the cutters gradually or let them fall. The Hayward machine had a treadle or lever work to lift up the swing

containing the cutters and throw it out of the way, so as to allow new work to be put in. I understood Mr. Goodman to say that he saw that machine, and examined it, at the time he took out his patent, or a little before, and knew of all these things at the time. This, I think, completes the substance of the conversation.

Int. 6. State whether or not in the conversation mentioned in your last answer, Goodman mentioned having any interview with Hayward, the constructor of the Hayward machine.

Ans. I understood him to say he did have one. Mr. Hayward consented that he should look at his machine.

Int. 7. Did you know the business relations between Stimpsons and Hale at the time you were acting as agent as above.

(Objected to.)

Ans. I did.

Int. 8. Please state them.

(Objected to.)

Ans. Mr. Hale had made a contract with the two Mr. Stimpsons Warren and Charles, and Goodman and Doane. I think Mr. Goodman was one of the four—I know the others were—to sell them the mill, privilege, patent right, and business for some $7,000, or thereabouts, and it was to be paid for in pianoforte legs, and they were to have the privilege of making them. Mr. Hale was to assist them in furnishing funds to buy the stock, and was to take the legs off of their hands and sell them. They had nothing to do but to manufacture and to give them over to him. Mr. Hale, I think, retained the business and property in his hands until he was paid. That was, I think, the understanding.

Int. 9. Was it during the existence of the relations you have mentioned in your last answer, that the Brooks suit in New York was commenced, or in progress?

Ans. I think it was commenced at or about that time.

Int. 10. Did you or not hear the relations of the Goodman and Hale machine discussed in the presence of Hale and his counsel in New York?

(Objected to.)

Ans. I did.

Int. 11. State, so far you are able, that discussion.

(Objected to.)

Ans. I believe it was at Mr. Gifford's office, No. 17 Wall
197 street. He wished to know all the points that could be brought up against the Goodman patent; what the most formidable ones were; and the Hayward machine was brought up and considered the most formidable opponent at that time. The similarities and dissimilarities were stated as above. Those same points were discussed at some of the first interviews with Mr. Gifford, when Mr. Hale and Mr. Goodman were present, and afterwards when Mr. Goodman only was present, and then again with the Stimpsons. There were a good many discussiens on the lifting gear; Mr. Gifford considered that the most important part of the patent, and a very large share of the proof to maintain the patent depended upon making that point clear. Every

part of the machine almost was taken to pieces and examined, the carriage and the cutters and the revolving work of the index were examined, and he thought those were not points strong enough to maintain the patent on, because they were used for other purposes. The index was used for cutting gears and various purposes, and had been in use for a long time, so that it had become common mechanical property. His decision on the point was, finally, that the lifting gear and the combination of the parts of the machine and its adaptation to this work were the grounds upon which the patent could be maintained.

Int. 12. State whether Messrs. Hale or Goodman, or either of them, expressed any assent or dissent to Mr. Gifford's opinions, or any of them.

(Objected to.)

Ans. They did not dissent. I considered them as tacitly admitting the thing without saying much about it.

Int. 13. Were you or not ever requested by any of the parties to make inquiries of Mr. Gifford as to the time of trial of the suit in New York?

(Objected to.)

Ans. I was requested to ascertain why the trial was delayed, and Brooks kept running for months and months. The request was made by Charles Stimpson and Mr. Doane, and I think Mr. Warren Stimpson and Mr. Goodman were present at the time, but I can't say certain.

Int. 14. Did you not, in consequence of such request, have any conference with Mr. Gifford on that subject?

(Objected to.)

Ans. I did.

Int. 15. State the result of that conference.

(Objected to.)

Ans. I asked Mr. Gifford why this matter had been delayed so long. I told him that parties wished to know, and he asked me who wished to know. I told him Mr. Stimpson and Doane. He said they were not
the parties who employed him. He wished to know then how
198 and in what manner they became interested in the suit. I informed him. He then told me that when the parties who employed him wanted the suit put through to trial, and were willing to back it up, he would do it. I asked him if the suit wasn't brought for the purpose of bringing it to trial. He said he thought not. It was only intended to keep the parties who were to buy easy until they should come into possession, and then the party who brought the suit would drop it. After I received that information I reported to all the parties interested.

Int. 16. State whether or not when you reported the statements of Mr. Gifford mentioned in your last answer, to Mr. Hale, he, Hale, made any reply.

Ans. He made no reply, turned up his eyes and laughed a little, and said nothing.

Int. 17. State whether or not you have ever had any conversation with Mr. Allen Goodman in reference to the Oaks machine.

Ans. I have.

Int. 18. Please state such conversation.

Ans. It was about the time, just after, I think, Oaks had got his machine going at Westfield to try it. We discussed the question whether it was an infringement of the Goodman patent or not. I said to Mr. Goodman I did not know how Oaks had constructed his machine. He informed me that it was so constructed that by means of gears the patterns run twice as fast as the work to be wrought; in consequence of those patterns feeding twice as fast, he was not under the necessity of having this lifting gear. I said to him, if that was his plan it was the same plan that Mr. Wheeler and Mr. Oaks and myself had consulted about a year or two before; that we had two plans to get round the Goodman patent, and this was one of them. We went on further to state that the patterns described in the patent were to be of the same conformation as the work wrought, and that this differed in a similar way to that in which the cam machine made by Mr. Goodman differed.

Int. 19. Did or not Mr. Goodman express any opinion as to whether the Oaks machine infringed upon the Goodman patent?

(Objected to.)

Ans. He thought it would complicate the difficulty of maintaining the Hale and Goodman patent, and give them, the Westfield men—I mean the Stimpsons and Oaks—a pretty good chance for maintaining a suit, or something like that.

Cross-examination:

Cross-int. 1. What was the result of the first suit against Brooks?

Ans. The first suit against Brooks had only a one-sided trial. We waited there something like a month. The other cases were
199 all disposed of, and this case came up all of a sudden, and neither Mr. Brooks nor his witnesses were present. The judge said he had given them sufficient notice; they had been long enough getting ready, and he wouldn't wait. The plaintiff's witnesses were heard; the suit was Hale *vs.* Brooks; the case was given to the jury; a verdict given for the plaintiff for, I think, $3,333 33.

Cross-int. 2. Did you see the model of the machine, for using which the second suit was brought against Brooks? If so, please describe it fully.

Ans. I think in the first place there were not two suits, but two trials on the same suit. I think Mr. Brooks got a rehearing. The model on this rehearing was the same as before.

Cross-int. 3. Do you know whether there was a third suit or not?

Ans. I think there was not. I have no knowledge of any.

Cross-int. 4. What was the result of the rehearing?

Ans. Mr. Brooks got the damages reduced to $1,000. If there was a third suit, it was an injunction from the court.

Cross-int. 5. Where was Mr. Hale when you communicated to him Mr. Gifford's reasons for the delay?

Ans. I think he was in the pianoforte factory at North Dana, where they made the legs.

Cross-int. 6. What year was that?

Ans. I should think thirteen or fourteen years since; I have no data here by which I could fix it.

Cross-int. 7. How long before the first trial?

Ans. I should think it was three months before. I think the first trial was the last of October or first of November.

Cross-int. 8. Where did Mr. Hale live then?

Ans. He lived at North Dana before he moved to Philadelphia.

Cross-int. 9. How soon after the first trial did Mr. Hale move to Philadelphia?

Ans. I should think the next spring. I am not certain but that he moved before that.

B. N. BULLOCK.

200 *Deposition of Lyman Wheeler.*

WEDNESDAY, *March* 16, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Lyman Wheeler; am forty-five years of age; I reside in Orange, Massachusetts, and I am a machinist.

Int. 2. Did you build a machine for planing pianoforte legs for Mr. Stevens, of Westfield, last summer? If so, will you look at the model labelled "Stimpson No. 2, H. F. S.," and state whether it is a correct model of the machine?

Ans. I did. I think it is similar to it. I see they have some more to it. I see there is an index, and leg, and so on—a pattern put on. Otherwise I should think it was similar to the one I made.

Int. 3. Did you furnish the jack which holds the leg? and was the machine designed originally to be used with a pattern and index, in the manner shown in the model?

Ans. I did; and the machine was designed so to be used.

Int. 4. Where was that machine built, and at about what time?

Ans. It was built at Orange, in my shop. I think I was at work on it in July last.

Int. 5. State whether or not the machine was built openly, as other work was done in your shop, and sent off openly to its destination? and what opportunity there was for people to see it when it was in course of construction, and when it was sent away, and whether any effort was made to keep it concealed or not. State the circumstances fully.

Ans. I never closed my shop since it was made against no one, either for this machine or for anything else. It was built openly as other work was done in my shop, and was sent off openly. There was as good opportunity for people to see it while being constructed and sent off. There was no effort to conceal it. On the contrary to that, there were four or five called to see it at the time, as part of those parties wished to purchase similar machines. (Last clause of the answer objected to as irresponsive and incompetent.) There were from

thirty to forty men at work in the building on each side of me, occupying each end of the building of which I occupied the middle room. Some thirty men who were at work in one of the rooms had to pass through my room for their daily business.

Int. 6. State whether Mr. Warren Hale, at any time after the machine was built, had any conversation with you about it, and
201 about building a model of it for him; and if so, state when and where it occurred, and all that passed between you in reference to it.

Ans. He had such a conversation with me, I should think not far from four weeks ago, in my shop; it may be a week or two longer than that. He came in to order some other work; just as he was going out he turns round to me, and says he wants a favor of me. "I don't know as you will grant it, but I think you will; and, in fact, I know you will." I said to him, "I can tell you better when you tell me what it is." He said he wanted me to make a model of the machine that I made to go to Westfield. I told him I ought not to have made the work which I had then promised him. I promised it to him before I thought of my other engagements; but, said I, "I will say to you what I will do. I will furnish you shop room and tools of all kinds, lumber or anything else you may want, patterns of the machine, and you may do it yourself, or send aman to do it. When done, will tell you if it is correct. I won't charge you one cent for any of those things or favors." I then took him into the room and showed him some castings, which were condemned, that were made for parts of the machine, the patterns of which were at the foundry; but I told him I would get them for him to work by, but I was so engaged I could not do it, at any rate, at present. That was the principal part of the conversation that I think of.

Int. 7. If, before you built this machine, you had ever built another machine from the same plan, for planing work on different sides, and of an irregular profile, state when it was that you built the first one, where it was, what work it was designed to do; and if you have a model of it, will you produce it, and explain the original construction of the machine and its operation?

Ans. I have built a good many such machines. I built the first one the summer after I was twenty-one, I think in the year 1840, in the town of Wendell, in a shop owned by Amasa Chamberlain, which I hired of him. It was designed to do various kinds of work, to be used principally for making knife and chisel handles of various kinds. I made with it some parts of bed-steads, and of some other kinds of furniture, which I cannot now call to mind. (The witness here produced a model, marked "Wheeler No. 1, 1840, H. F. S., com'r.") The way the machine worked was as follows: The piece marked B is the cylinder cutter, put into the lathe. The parts marked C, on this piece, represent the cutters. This piece B is placed in the lathe, and made fast as if it was to be turned. It revolves when the lathe runs. I then take the carriage marked A with the block in it that I wished to form, and pass it over the cutters *c*, *c*, giving the form of the sides of the carriage which rested on the cylinder.

202 Then turning the block of wood by this index to a certain space on the index, then passing it over the cylinder, as before, to cut another side like the first, and then repeating the operation until the work was finished.

Int. 8. State whether you used this machine in any other shop except the one which you have referred to before.

Ans. I have; I bought a farm and had a shop in the back part of my buildings, and used the machine there. This was in Wendell. I afterwards got a water privilege, and built me a water shop, and used it there. I think I may have used it in another shop afterwards at Greenwich, but cannot say positively.

Int. 9. If you can fix the date when you purchased your farm by reference to a deed, will you do so?

Ans. Yes, sir. The date of my deed when I purchased my farm, is November 25, 1840, and I moved on to it in the March following.

Int. 10. State how long you used this machine in those three shops.

Ans. I run it from the time I built it in 1840 until the time I went to Greenwich, about the 29th of November, 1843, the date of my deed from Gardner Wheeler, of the place in Greenwich.

Int. 11. State whether or not you had more than one pattern for making articles of the kind you have mentioned; and if so, how many, to the best of your recollection?

Ans. I should judge I had twenty, varying in length and proportion according to the size of the article to be produced.

Int. 12. State whether you have recently made any search for this machine or any parts of it, and what, to the best of your knowledge, has become of it.

Ans. I have, within about a week, at the request of the defendants, made search for work done on the machine. I went from Boston home to Orange for this purpose. I knew the machine was not in existence. When I went to Greenwich I bought me a farm, and worked on my farm and at blacksmithing. I sold the lathe that this run in to Danial Lombard, of Prescott, when I left Wendell and went to Greenwich, knowing what I was going to do when I went there, and not expecting to have any use for this wood-working machinery. I took the irons and cylinders from such things as I thought might hereafter be of use, cut up and burnt up all such things as I thought wouldn't pay for moving, as it was a long distance and a bad road. I think I put into barrels some of the carriages or patterns, as you may call them. The cylinders were put in my tool chest. Can't say whether I used them while at Greenwich or not. When I went from Greenwich to Dana, I left there, at Greenwich, many things that I used to use, and carried some things to Dana that were barrelled up and boxed up. There at Dana my mill was burnt up. All of
203 my tools, and everything in the mill of that nature, was burnt with it. I know that some parts of this machine were burnt with the mill; I don't know how much. Some parts of the machine might have been left behind at Greenwich. Couldn't say whether they were or not.

Int. 13. You say you made search for articles which were made by the machine. State how much search you made. Whether you found any of the articles, and if you made handles for yourself at the time the machine was in operation, what has become of those.

Ans. Not but a little search, as I haven't had but a short time; I did not find any of the articles; the handles made for my own use, which were not worn out, were burnt up at Dana.

Int. 14. You say you think some of the carriages might have been put into a barrel when you left Wendell. Do you know what has become of them?

Ans. I do not; they might be moved to Dana, and they may be left there; still, there may be some found there yet; if they went to Dana, probably they were burnt up.

Int. 15. How long since you have seen any of them?

Ans. I saw one of the cylinders at Dana; I cannot fix the time exactly; it was some time after the time when Mr. Oaks and myself took a lease of the mill in Dana, which lease is dated April 26, 1851. Some time between that time and the time when the mill was burned, two or three years afterwards, I saw some of the carriages when I packed the stuff to go to Greenwich; don't know but that I saw some at Greenwich; don't fully recollect now; it is my impression that I did, the more I think of it.

Int. 16. Have you made any search for them at Greenwich or Wendell within the last week?

Ans. I have, at Greenwich, but not so much as I might if I had time.

Int. 17. Can you give any idea of the number of handles or other articles which you have made upon these machines? State whether you made them for sale, and whether or not you made them during the whole period after the machine was constructed, while you remained at Wendell.

Ans. I should think I made several hundred handles; I made some balls on the end of bedstead rolls, and various other things that I don't seem to call to recollection to describe; I made them for sale and for my own use; I made them during the whole period by spells along as occasion required.

Int. 18. How soon after you went to Wendell did you build this machine?

Ans. I built the lathe almost the first thing I did; I should have the impression that I added this machine to it soon after I had completed the lathe.

Int. 19. Will you state how you were led to invent or construct this machine? when you had your first ideas about it, and how you came by them?

204 Ans. I was at Worcester, at one Mr. Babbitt's, if I remember right, on a visit. Mr. Babbitt said to me that he had a boy that could joint as many boards in a day with a fore-plane as I could with a jointer. That was a curiosity to me, and I asked him to see the operation; he took me to his shop and showed me his plan, which was to place the board to be planed between two straight edged

boards and fasten it there; the plane was so arranged with a guide that the plane iron cut only on the edge of the board to be planed, which was then planed down to a level with the boards on each side. This was when I was about eighteen or nineteen years old. When I was twenty-one years old, I found, by experimenting, that I could apply this principle to irregular forms, and from this originated the idea of my machine.

Int. 20. If you had any other machines attached to your lathes state generally what they were.

Ans. I had a small jigger saw, a small nice grindstone, boring machines of various kinds, a tenoning machine for tenoning spokes and other things; I had another machine, which consisted of a carriage which I passed under the revolving cutter fixed in the lathe; on the top of the carriage there was a plane-table, upon the surface of which I fastened the work to be cut—the work or such things as I used to hold the work; that table was adjusted to the face of the cutter by screws and slides, so that I could give any desired pitch to the table holding the work, and thus to the work itself. At one time I fixed this to feed through by a screw, and at another time by a gear, and have also worked it through by hand. I used the carriage marked "Wheeler No. 1, 1840," on this table, by making one end of it fast to the table, and at one time by raising or lowering the other end by hand, adjusted the pattern to the face of the cutter, and at another time rested the other end upon a spring, which kept the pattern pressed to the cylinder, in this way making the machine self-adjusting; when I used the carriage on this table as above described, I made it longer, and, I believe, wider and heavier every way than when used without the table.

FRIDAY, *March 18th*, 1864.

Int. 21. State how much you used the device or apparatus last described, in connexion with the carriage for making handles or similar articles.

Ans. Not a great deal; only at such times when I was making experiments and cutting various kinds of wood; some was more difficult to cut, owing to the nature of the wood, and I could manage it more firmly and steady on that table.

Int. 22. If you constructed and used any other machines about that time in which you employed a carriage to move work up to a cutting instrument of any kind in connexion with an index for turning the work upon centres to be operated upon on different
205 sides in succession, will you state what they were and describe them as fully as you can, and if you have models of any of them, will you produce them, and explain their different parts and the mode of operation of the machine which they represent?

Ans. I did construct another machine to be used in slabbing hubs and boring and mortising the same. (The witness here produced the model marked "Wheeler No. 2," and proceeded as follows:) The machine was placed against the side of a circular saw on the side which is marked "Wheeler No. 2," in the model, the hub to be sawed

having been first placed in the machine on the mandril and pressed up to the index in order to hold it securely; one side of the hub was then sawed, by passing the machine with the hub upon it by the side of the saw; the index was then turned, and another side taken off in the same manner; this operation was repeated until the desired number of sides was obtained; I then drawed the machine back and dropped the latch into the guide, and then passed the machine by saw as before; by this means giving the desired curve to the face of the hub which was subjected to the operation; this movement I repeated until all the faces of the hub were curved. I also used this machine for boring and mortising. For boring and mortising I used the machine in the following manner: The hub being fastened upon the mandril as before, I placed the machine upon ways on the lathe running towards the bit, with the centre of the mandril on a level with the centre of the bit; I then turned the carriage on its centre sufficiently to obtain the desired angle, and give the right direction to the hole to be bored in the hub, and fasten it there, and then bore the hole by moving the carriage on the ways towards the bit as it bores; when I have obtained the desired depth, I draw back the carriage; I then turn the index and repeat the operation as before, until the desired number of holes is bored; it being necessary to have the mortise hole wider at the top than the bottom, to obtain this result I move the machine forward a little, and then turn it slightly on its centre, thus changing slightly the angle at which the hole is bored; I then fasten it again and pass it over the ways as before; I then turn and fasten the index again as before, so as to get the second tier of holes on the same line with the first; for convenience o holding the hub firmly, I mortised it while still on the mandril, turning the index so as to keep the side to be mortised uppermost.

Int. 23. State where you used this machine; how much, and for how long a time.

Ans. I used it in Wendell, in the mill owned by William Bent; I used it more or less two or three years; I made a number of hundred hubs, and did other work on it; I used it in all the different shops in which I worked, in Wendell.

Int. 24. Will you explain what the holes are for in the in-
206 dex-plate of the model marked "Wheeler No. 1, A?" State whether there were such holes in the original machine, which you made, and why they were there.

Ans. They were there; I first used them instead of a spring, and fastened the index by a pin slipping through the end of the machine into one of the holes in the index; then when I wished to turn it for the next square on the handle, I changed it to the next hole in the index, and so repeating the operation from time to time, until the desired number of squares was obtained; I afterwards tried a spring with notches in the index, as represented in the model, and finding it more convenient, substituted it in place of the holes.

Int. 25. Will you, as soon as you have the opportunity, make further search for parts of this machine, and if you find them, produce

them for examination, in this case? I mean the "Wheeler machine No. 1."

Ans. I will.

Int. 26. Will you look at the two models marked "Hayward, E. Merwin, U. S. C.," and "Stimpson, H. L. H., U. S. com'r," and state whether the two modes there represented for confining the work on the carriage, one of which, that on the Hayward machine, I will designate as a bed and dog, the other, as a centre and index plate, were or were not, within your knowledge, at the time when you resided in Wendell and previously, both known and used by mechanics for confining work upon carriages to be moved up to cutting instruments of various kinds? and if so, how generally or universally they were so known and used, and whether or not the adoption of one or the other by a mechanic in a given case, was a matter of judgment or discretion, in the construction of machines, depending upon the nature or character of the work to be done, and as a matter of convenience?

Objected to.)

Ans. I should say they were both generally known, by me, by millwrights, and by other mechanics, and for that purpose; and the adoption of the one or the other by a mechanic, in a given case, was a question of judgment, depending upon the character of the work and convenience.

Int. 27. State where you went to reside, after leaving Wendell.

Ans. I went to Greenwich, in about the month of December, 1843.

Int. 28. How long did you reside there, and what business were you engaged in while there?

Ans. It was nearly eight years; my business was farming and blacksmithing, mostly.

Int. 29. If, while you were there, you had anything to do with the construction of a machine for planing spokes, state for whom it was constructed, and how soon after you went there, how
207 much you did upon it, and look at the model marked "Powers No. 1," and state whether that model represents the machine, especially as to its working parts, or how nearly it represents it.

Ans. I worked upon the wood work of a machine for Mr. Powers, and under his direction. I can't tell how soon after I went there, but I think it was the following spring. I made the inside frame part, and did some other work which I cannot describe, as he put it together. I should think the inside frame and the working parts of it represent it very nearly. This outside frame marked "Powers No. 1," I should rather think didn't slide with the inside frame as it does in the model, but I don't recollect so well, as I didn't put it together. I think that in the machine the outside frame in the model was wholly or in part fastened to the bottom piece, marked *h* in the model. I think the index to the machine was different from the one in the model, but I do not recollect it so as to describe it.

Examination resumed, June 21, 1864:

Int. 30. State whether or not, while you resided at Greenwich, you proposed at any time to engage in the business of manufacturing pianoforte legs, or similar articles, and if so, with whom, and what machine you designed to use, if any, for planing such work.

Ans. I did at that time, with Charles N. Powers and Stephen Oaks, of Greenwich. The machine which we talked about, and which I described to them, was like the one shown by the model, marked with a ×, and with a label annexed marked Stimpson No. 2, H. F. S. This is the one I thought the most of, but I made proposals for a machine something different from that, like the one I cut chisel handles with. This was during the earlier part of my residence in Greenwich. We talked about the matter at different times for three or four years.

Int. 31. In what respect did the machine that you say you talked the most about, differ from that on which you cut chisel-handles?

Ans. The cylinder with the cutters on it stood upright in the first machine, while in the one on which I made chisel handles, it laid down horizontally. The principle of the two machines I considered to be the same. (This last paragraph objected to by complainant's counsel.) I preferred the first machine for the reason that the weight of the block of wood and carriage could slide on the table, while in the chisel machine it had to be held in the hand and rested upon the cylinder.

Int. 32. When did you leave Greenwich, and to what place did you go to reside when you left?

Ans. I left Greenwich in the spring of 1851, and moved to North Dana. I fix the date by reference to a lease from Mr. Goodman to myself and Wm. N. Oaks.

Int. 33. What business did you engage in when you first went there?

208 Ans. In getting out chair stuff.

Int. 34. After you went there did you have any connexion in business with Allen Goodman, one of the plaintiffs in this suit? and if so, state when it commenced and what the business was, and how long such connexion with him continued.

Ans. I did. On February 11th, 1852, I purchased of him an interest in certain property in North Dana, and about that time commenced business with him. At first we carried on the saw-mill and the grist-mill, and got out some spokes together. Some time, I think, in the year 1853 or 1854, we took a contract with Stimpson & Doane for the manufacture of pianoforte legs, and we worked together under this contract, I should think a little short of a year, and then we dissolved and divided the property and the contract.

Int. 35. State whether or not you and Mr. Goodman had any talk together, before you took the contract with Stimpson & Doane, about going into the manufacture of pianoforte legs together, on your own account; and if so, for how long a time you talked upon this matter; and if you had any conversations together in respect to the machines

which you should use for planing legs, state what it was and what machines you proposed to use; and if you explained or described to Mr. Goodman any plans of your own for a machine, state what he said, if anything, concerning them, and concerning such machines being an infringement upon the patent of Hale & Goodman.

Ans. We did. I think we talked about it more less for a year or more. I think the first talk we had about it, was that Mr. Goodman proposed that we should use a machine which he owned, and which we called the cam machine. I objected to using that, as I thought the principles of it were not good. I told him I thought I could make a machine that would work better than that, and would work better than the machine which Stimpson & Doane used. He wanted to know then what the principles of my machine were. I described to him as nearly as I could, without having a model to show him, a machine like the one represented by the model marked × and labelled "Stimpson No. 2, H. F. S." I asked him then if he thought that would infringe on the patent for the machine which Stimpson & Doane used—the Hale & Goodman patent. He thought that it would not, but he thought that my way of constructing a machine wouldn't work, for the reason that the block and carriage would be so heavy that it would be too hard work to slide it on the table in order to cut and shape the leg. I then asked him if he could make any improvements on my plan. He thought he could. I said I wished he would show what his improvement would be. He explained his plan in this manner: He proposed to have a second carriage travelling upon a track fixed on the table in front of the cutter, and to
209 be moved by a rack and pinion with a crank to be turned by hand The carriage represented in the model marked + was to be fastened to his second carriage by means of a pivot inserted in an extension of the lower part of the right-hand end of the carriage shown in the model, upon which pivot this carriage could be swung towards and from the cutter. The carriage shown in the model was then to be pressed up to the face of the cutter by the operator with one hand, while he turned the crank with the other hand, and thus moved the two carriages forward. I asked him then if that wouldn't make it more like the Hale & Goodman machine, having the rack and pinion, and carriage running on a track as theirs did. He said if it did, there was no patent on the carriage nor on the rack and pinion; that any one had a right to use them. I told him I thought the second carriage and rack and pinion were needless, as it would make more weight and more work to run it back and forward, and that by having the carriage lighter and controlling it immediately by hand, the operator could more quickly, as it were, feel the operation of the cutter and judge whether it was working properly, and could more readily adjust the work to the cutter, and prevent it from being chipped as a consequence of two rapid feeding. I asked him whether he thought a machine made on my plan, like the model marked +, would infringe upon the Hale & Goodman patent. He said it would not, as the patent on their machine rested on the raising and falling the cutters by gear, and on the rollers running over the pattern, and my plan

had nothing of that kind; but still he thought it would be a hard-working machine. We had a number of different conversations, the substance of which I have given in my answer as just stated.

Int. 36. Did you or not finally make any arrangement with Mr. Goodman to manufacture legs on your own account?

Ans. I think not.

Int. 37. Did you make any arrangement with him to manufacture legs for other parties, and if so, for whom? State how the arrangement was brought about, who conducted the negotiations between the parties, and what passed between Mr. Goodman and yourself, at different times, about entering into such contract, and what reasons, if any, Mr. Goodman assigned why you should enter into such contract rather than to engage in the manufacture of legs upon your own account.

Ans. We did, for Stimpson & Doane. Mr. Goodman was principally concerned in bringing about the arrangement. Mr. Goodman came to me one day when we were at work in the mill, and said that Stimpson and Doane spoke to him about making a certain quantity of legs for them while the term of the patent lasted. I asked him what their object was to have us make them for them, as they had the machinery to make them. He said that they had heard we
210 talked of making legs with some different machine from theirs, and he thought they wanted to put a stop to it, and that if we wouldn't make any for the term of the patent, which would be about six years, they would give us a good job for that time. I asked him if he thought they would give us a job that would pay as well as it would for us to go into it on our own hook. He said he didn't know as they would, but he thought they would give us a job, which, perhaps, would be better in the end than it would be for us to go into it on our own account. I asked him why it would be better, if they didn't give us so much as we could make. He said if we should introduce other machines, which had no patent, or such machines as almost any one might take up, others might go into the business the same as us, and in that way it might kill the business. "You," he says, "have property as well as myself. It is for our interest to keep the business up, and make it as good as it can be, as that business is the making of the village." I said to him to see them again and talk with them, and see how much he could get per set. He said to me, perhaps you had better have a talk with them. I told him no, as he was well acquainted with them, and he could do the talking and get a bigger price than I could. He said he would see them again as soon as he could, for they were afraid that we should go into the business, and that he thought we could get our own price if it wasn't to high. We then talked it over between us, what those legs cost per set, such patterns as they were making then, and agreed on a price that we thought we could afford to make them for, $2 50 per set, and we concluded that if we could get that price per set that we had better take a job of them than to make for ourselves, provided they would give us fifty set a week for the term of the patent. He told me shortly afterwards that he had another talk with them, and that they had offered $2 a set for the

plain patterns that they were then making. The sweep leg, so called, they would pay more for. I told him I should not want to make them for that price. He said that he shouldn't want to, for we could just as well have more, for they were afraid of our introducing a new machine, which, in the end, would be an injury to them. After that, he said he had had further talk with them. He asked my opinion, if we had better vary on our price. I told him if his statement was all right, as to the expense of making them, I thought we could do them for $2 25, the plain patterns, and that if new patterns were introduced, requiring more work, they ought to pay more according to what the extra expense was. He thought that those prices would pay, himself, and we concluded to make them that offer, and to stick to it. Shortly after, he said he had seen them and had made that proposition, and that they had agreed to pay it and to furnish a machine of their own to make them during the term of the patent. We
211 then talked it over, and thought that was the best way that we could do. I then went and saw Stimpson and Doane, and talked with them myself, and asked them if they had any objections to my building a machine to make these legs. They said they didn't know as they had, if I would make it like their patent. They didn't want me to introduce any new kind of machines, for that was the object that they had in giving us that job, was to keep us from making any new machines. They had paid us our own price, and so that we were going to make well in making the legs, and now they wanted us to stand by them and work for their interest as well as our own. I told them I would, and they said that they wanted me to speak well of their patent, and not to speak to any one about getting up any other machine while we worked for them.

Int. 38. Did you, about that time, explain to either Mr. Stimpson or Mr. Doane the plan upon which you proposed to construct a machine for planing legs, or make any statement to them about having a plan for such machine? and if so, wh t reply did they make to you? What, if anything, did they say about its being an infringement of their patent?

(Objected to by complainants' counsel, the first part as being incompetent, and the remainder because it does not appear that either of the complainants were present.)

Ans. I talked it over with Mr. Doane, and I don't know but that I had some talk with Mr. Stimpson; I don't recollect so fully; I explained the machine to Mr. Doane particularly; Mr. Doane said he didn't know whether it would infringe or not, but that they had had trouble enough about their patent, and they didn't want anything new introduced and flung before the public; and I recollect Mr. Stimpson spoke to me one day, and said if I was going to do anything about new machines, or talk about it, they didn't want anything to do with us, as they had already had trouble enough.

Int. 39. Who were the members of the firm of Stimpson & Doane at that time?

Ans. Charles N. Stimpson, Hammond Doane, William Stimpson, and perhaps Warren Stimpson, but I think not.

Int. 40. Which of the Stimpsons was it who made the remarks to you which you have just stated?

(Objected to as above.)

Ans. Mr. Charles N. Stimpson.

Int. 41. Did you use machines which were furnished you by Stimpson and Doane, or did you make machines yourself to use?

Ans. While Goodman and I remained together, we run the machines furnished by them. After we dissolved, we divided the contract, and used the machine alternate weeks, moving it from my part
212 of the building to his, and vice versa; and then, in order to save this trouble, I obtained Stimpson's consent to my building a machine like theirs, which I did, and then Goodman paid me a price agreed, and I gave up the first machine to him. The machine for making sweep legs, furnished by Stimpson & Doane, we used in common, as before.

Int. 42. If, while you were negotiating with Stimpson & Doane for a contract, or while you were working under that contract, you made any proposals to them to build a machine upon your own plan, to use instead of theirs, state whether they assented to such proposal, and what they said in respect to it.

(Objected to.)

Ans. I made such a proposal a good many times; they wouldn't consent to it; they said that it would be an injury to them, and as they furnished a machine for me to work with, they said that if I wanted to work out anything for myself, such as stair-posts, &c., which didn't interfere with their leg business, that I might use their machine to do it with.

Int. 43. Did they state what the injury would be to them?

(Objected to.)

Ans. They didn't want that I should make other machinery for cutting irregular shapes for this reason: if I should get up something that everybody could build and use, it might be an injury to their leg business; we had long talks many times on this subject, but that was the substance of it.

Int. 44. State whether or not they made any condition with you before they would give you a contract, about doing the work on their machines; and if so, what it was, and whether they would give you the contract unless you would comply with the condition.

(Objected to.)

Ans. They did make a condition; they said if I wouldn't make the legs on their machine, or a machine like theirs—like their patent—they wouldn't give me the job, for that was the object of giving me the job, was not to have me build any other machine.

Int. 45. Why did they furnish machines to you in the first instance, instead of your providing yourselves with them?

(Objected to.)

Ans. The reason was, they said, they didn't want us to build any on any different plan.

Int. 46. When you divided the contract with Mr. Goodman, and built a machine according to the Hale & Goodman patent, to use your-

self, state whether there was any agreement between you and
213 Stimpson & Doane, or any restriction or reservation made by them, as to what work you should do on that machine; and if so, what it was.

(Objected to.)

Ans. They gave me leave to use the machine in working on this contract, and said that I might do any other kind of work on the machine that didn't interfere with their leg business; any jobs, such as stair-posts, or other irregularly-shaped work; that I might do them on this machine, and they wouldn't charge me anything for the use of their right.

Int. 47. State whether they assigned any reason for not charging you for this right; and if so, what it was.

Ans. I told them I wanted to make some stair-posts, and some caps and feet to melodeon legs or to piano legs; they said that was nothing in their line to injure them, and they had rather I would use their machine or right than to build anything on my own principle, as it might be an injury to them to have anything of that kind built.

Int. 48. State whether or not you did manufacture such articles, including melodeon legs and billiard-table legs; and if so, to what extent.

(Objected to.)

Ans. While I was working under this contract with Stimpson & Doane, which was also afterwards continued with the new firm of Johnson, Stimpson & Co., I made for myself stair-posts, melodeon legs, and piano legs, and I think I made some billiard-table legs; I made at this time what was called the cone leg, for pianos and melodeons, with a gothic cut round them, and some with an oval cut on the cone, which were an entirely different leg from those made by Stimpson & Doane, and did not interfere with their leg business. I also made what is called the regular machine leg, for melodeons, but got up a pattern for myself. They gave me leave to do so, if I would get up a pattern different from theirs; I did work outside of the contract to the extent of from ten to fifteen hundred dollars a year after I began on it; I didn't do it when I first worked under the contract, for a year or more after I began the contract.

Int. 49. State whether on not any of the members of the firm of Stimpson & Doane, or of their successors, Johnson, Stimpson & Co., ever made any complaint to you about the extent to which you were using the privilege of making work for yourself; and if so, who it was? and if you made any proposition to them to give up the privilege, and to build a machine on your own plan to do both your own work and theirs with, state what the proposition was, to whom it was made, and what reply was received?

(Objected to.)

Ans. They did make such complaint; William Stimpson,
214 George T. Johnson, and I think one or two others of the company, and I think Charles N. Stimpson, complained to me; I made a proposition to William Stimpson, and I think to Charles N. Stimpson, and I think to most all of them, but more fully to William Stimp-

son. I had a long talk with him; in answer to his complaint I proposed to build a machine on my own principle, to give up the use of his altogether, and to put myself under fifteen hundred dollars bonds that my machine should not infringe upon his patent, and that I would fulfil my contract to furnish them with legs; that I would do all this they would give me twenty-five cents extra per set; I told him that I was at work on their machine and cutting this work of mine with it, for their benefit and not mine, and that most of the company knew it. He said, if that is so, go along. I have no fault to find.

Int. 50. What became of that machine which you built and used on that contract?

Ans. It was sold to the company of Johnson, Stimpson & Co.

Int. 51. State the circumstances under which it was sold, and what agreement, if any, was made in regard to your building a new machine upon the same plan or upon your own plan, and whether you did build a new machine upon the plan of the other machine; and if, previously to the sale of the machine, you had made an arrangement with them to give up your contract, state upon what terms or conditions such arrangement was made, and whether any stipulation was at that time made as to your continuing to use the machine you then owned, or to build one on your own plan.

Ans. Previously to the sale of the machine, after negotiating for some time for the cancellation of my contract to furnish them with legs, we finally agreed that I should give up the contract, and that as a compensation therefor, they purchased from me the greater part of my stock of lumber on hand, suitable for the leg business, at a price which we agreed upon, and gave me the right to use my machine made under their patent, for the manufacture of all kinds of melodeon legs on my own account, as many as I wished, and also the right to make a set of their machine legs for every piano case that I might make, and the same right in regard to billiard-table legs, a set for every table that I might make. I asked them to put it in writing, but they declined to do so, and then we agreed orally. They refused to trade with me unless I would keep my machine, made under their patent, and use it, instead of building one on my own plan. About a month or two after the making of this, a shop of theirs and mine were both burned at one time; one of their machines was burned, but I saved mine. They borrowed mine until I should get fitted up at Orange, to which place I was then about to move, and afterwards they proposed of buy it of me, and have me build another for myself just like it.

215 This I agreed to, and sold it to them, and put up a new one in my shop at Orange, like the one I sold them.

Int. 52. Did you build a new machine in the place of the one you sold, and of the same pattern?

(Objected to.)

Ans. I did.

Int. 53. Where did you use that machine, and how long?

Ans. I used it in Orange, Mass., I should think, for three or four years.

Int. 54. What did you finally do with it?

Ans. I sold it to Hale, Goodman & Co., of North Dana.

Int. 55. When did you sell it to them?

Ans. In the spring of 1860.

Int. 56. What price did they pay you for it, and how was it paid? State all the circumstances relating to the trade, and the negotiation.

Ans. They paid what I called a thousand dollars, for my water privilege at Dana, and for the machine, calling the machine a hundred dollars. It was all one trade. They gave me one hundred set of melodeon legs, and two pianos, I had negotiations sometimes with Mr. Hale, sometimes with Mr. Goodman, and sometimes with both, at various times during a year or more before the sale took place. The first particular interview that I recollect was with Mr. Hale. He wanted to know what I would take for the machine, and land, and water privilege at Dana, and asked me if I thought I had a right to run the machine, as he had got the patent renewed. I told him I thought I had, according to the agreement made with the Dana company before he came in, but if I hadn't the right to run it, I would stop it, if he said so; but I told him, "You will understand this much, that I shall make those legs, because I come honestly into the market; unless you buy my machine, and I agree not to make them." I told him what I would take for it—a thousand dollars for the land, water privilege, machine, and some patters and tools used in the leg business, and that I would agree not to make any more of those large machine legs, such as they made, while his patent was in force; only to work up such stock as I commenced working on. He thought the price was rather high. I told him I thought what I offered him was worth the money. The next time, I think, I met the two together. They wanted to know if I hadn't altered my mind, and what was the least I would take then. I told them I would take some part in property, instead of all in money, if it would convene them. I proposed to them that I should take a piano or two, and some legs, in part pay. They mentioned a piano at Winchester, N. H., which they offered to let me have, at Horace Stimpson's house, and a melodeon. They couldn't describe the melodeon fully to me; so that I could not satisfy myself about
216 taking it. They said if I continued to run the machine which I had, they should want me to pay them some damage. I told them I shouldn't pay them anything, as I considered I had the right to run it, and that if they didn't want me to run it, they must buy me out. At that time I think they offered me $750, in a piano, a melodeon, and the balance in cash. I told them I couldn't take anything less than I first mentioned. We had several conversations at which the subject was mentioned, at one of which I think they worked up to eight or nine hundred dollars, and still mentioned that piano and the melodeon, which I objected to taking. Some time in the spring of 1860, we met and talked it over, and agreed upon the price which they finally paid me. At this time there was some conversation as to my right to make legs which did not interfere with their business. I said to them that if they would leave that machine there for me to run, to make those legs which did not interfere with their business, I

wouldn't build any new machine; but if they took it away, I should be under the necessity of building something to do this work on. They said they would leave it there for me to use till they called for it, and then I might have sufficient time after they called for it to work up all such lumber as was in process of manufacture by the machine. I told them any time when they wanted it to send for it, and I would let them have it as soon as I had got my timber worked up that was under way, and then I would build a cheaper machine that would answer my purpose better than that. We then agreed upon a day on which the papers should be ready for execution, and at that time I went to North Dana with Squire Woodward. He drawed up the papers according to our agreement. They then refused to sign them, saying they had concluded not to trade unless I would take the piano at Winchester for one. I told them I wouldn't take it at any price which they would call reasonable, for it was not what I wanted. They said they would let the trade go by then. One or two months afterwards they executed the papers according to the first agreement, a copy of which I here produce to be annexed to my deposition.

Int. 57. What kind of legs were they, to which you have referred as not interfering with their business, and which you were to continue to make?

Ans. What is called the cone leg, with caps and feet on them. They had to be cut by a machine for cutting irregular forms like those used in planing pianoforte legs.

Int. 58. State what arrangement was made about the delivery of the machine; at what place it was to be delivered.

Ans. They asked me, if when I got through with it, I wouldn't fetch it down to them. I told them no, they must come there and get it. They then asked me if I would deliver it to the depot, near my shop, if they wished to have me. I told them I would, if they wanted me to.

217 Int. 59. If the maching was to go to Dana, would it be delivered at the depot to go by railroad?

Ans. No; there is no railroad runs to Dana.

Int. 60. How was it finally delivered? Where did it go to from your shop?

Ans. They sent a team there and got it, and carried it to Dana, as I supposed. I have since seen it there.

Int. 61. How long did you continue to use the machine after the papers were signed?

Ans. I can't answer definitely, but think it was until the fall afterwards.

Int. 62. State whether or not, when that machine was taken away, you constructed one or more machines to use in its place; and if so, state what kind of machines they were.

Ans. I built two after that was taken away. One in about two weeks afterwards; the other, in about six or eight weeks. The first machine had a horizontal cutter cylinder in the plane of the top of the frame. [Thursday morning June 23, 1864.] The carriage which held the work moved backwards and forwards over the cylinder on ways.

The carriage had attached to each of its four corners an iron support, which was fastened to the carriage by a thumbscrew passing through a slot in the iron, which thus enabled either end of the carriage to be raised or depressed, and the lower ends of these iron supports rested on the ways. This carriage frame was made of solid cast iron. The work was held in the carriage on centres, with an index and clutch for adjusting and fastening it in the desired position. The carriage was moved back and forth by hand. For the purpose of planing plain or fluted cone legs, the iron supports were adjusted, leaving one end of the carriage lower than the other, so as to give the desired pitch to the leg. If I wished to make what is called a gothic leg, I put on the ways, sometimes a stop, and sometimes a pattern, according to the shape I wished to give the gothic. This was done in order to produce a curved plane, by means of which the gothic curves are produced. The stop can be used, when the curve of the plane corresponds with the periphery of the cutter. But when a different curve from that of the periphery of the cutter was required, then a curved pattern to produce the required shape was used, which was placed on the ways, and over which the iron supports ran so as to raise the work from the cutter. In all cases where the curve was required to be produced, at the commencement of the planing of a side, there a pattern was required in order to produce the proper curve. Whenever I made gothic work I used patterns to produce it.

The other machine which I built was like the model marked + and labelled Stimpson No. 2, H. F. S. There were two vertical
218 cutters running in opposite directions entirely independent of each other. One or the other was used as the grain of the wood required. The carriage was substantially like the one shown in the model, the principles of the two being precisely alike. The pattern was on top, and the work was held on centres with an index and clutch, the same as in the model. In using it, the carriage rested on the table, and was moved to and from the cutters by hand.

(The whole answer objected to as being immaterial and impertinent.)

Int. 63. Will you refer to your answer to the twentieth interrogatory, and state how far you considered the first of the two machines you have just described, to correspond with the machine for planing, described in the answer to that interrogatory.

(Objected to.)

Ans. I should say that the principles of the two were alike, although they may differ a little in the making of them.

Int. 64. How long did you run the two machines at Orange, which you have just described, and what kind of work did you do, and how much?

Ans. From some time in the fall or winter until the 20th of August following; possibly a year longer, but I think I have stated the time correctly. I worked on piano legs and melodeon legs mostly. The machines were in constant operation, not all, but the greater portion of the time. I cut several hundred sets.

Int. 65. State whether or not the machine which you first described as having a horizontal cutter, could have been used to cut curved work, like that cut on the Hale and Goodman machines; and if so, how it would have been done.

(Objected to.)

Ans. It could have been so used. It might be done in two ways. One way would be to put patterns upon the carriage, and to let the patterns over the cylinders or on the boxes. The other way would be to put the patterns upon the ways, as I have above described for cutting gothics.

Int. 66. State whether the machine was designed to be used in these ways when originally constructed, and whether you ever did so use it?

(Objected to.)

Ans. It was designed so to be used, and I used it in the second way when cutting gothics, as above described. The boxes in the machine were made so that the carriage could be run over them in the manner I have mentioned.

Int. 67. State what would be the difference, if any, between the first of the two modes you have mentioned, of using the machine, and the mode of using your handle machine, made in 1840, and shown by the exhibit marked Wheeler No. 1, 1840, H. F. S., com'r.

219 (Objected to on the ground that the witness is not an expert.)

Ans. The manner of using the two machines is precisely the same.

Int. 68. Why did you not use the machine in the first of the two modes you have mentioned, if you did not?

(Objected to as irrelevant and incompetent.)

Ans. Because this was built to do heavy work, and the cylinder was consequently too large to cut the small curves on the work, which I had also to cut. The other machine had small cylinders suitable for cutting small curves.

(Answer objected to as irresponsive.)

Int. 69. State whether or not there would have been any difficulty in cutting large curves, if you had had occasion to do so, in the horizontal machine.

(Objected to)

Ans. There would have been none.

Int. 70. State whether or not, either Mr. Warren Hale or Mr. Allen Goodman saw these machines while they were in existence, or saw them in operation, or saw the work which was done upon them.

Ans. They were both in the shop at different times, while the machines were sitting in the shop. They passed by them. I couldn't say whether they stopped and looked them over or not, but I think they have. I spoke to them at one time, and told them I had them in operation, and that I thought it was a saving to me, over the old machine that I let them have. The work was sitting round on the floor, most of the time by the machines, so that any one could see it that passed by. I think that Mr. Goodman took up some of the caps and feet and looked them over one time while in there.

Int. 71. State whether or not either Mr. Hale or Mr. Goodman ever complained to you that the machine was an infringement of their patent, or objected to your using it, or made any claim for compensation for its use.

(Objected to.)

Ans. They never found any fault with me, to my knowledge, and never made any claim for compensation.

Int. 72. State in what respect, if any, the machine you have described as having two vertical cutters, differed from the machine which you afterwards built for Messrs. Stimpson & Co., and which is represented by the model marked + and labelled Stimpson No. 2, H. F. S., either in its construction or in the manner of using it.

(Objected to.)

Ans. The only difference was, my machine had two cutters and was a little smaller than theirs. The working principles were precisely the same. The manner of using the two was the same.

220 Int. 73. Did you know when William N. Oaks invented the planing machine for which he took a patent? and if so, how did you know?

Ans. I had talked with him about the machine both before and after he went to Westfield. He described the machine to me in a measure, and explained it to me fully, so that I could have built a machine. This was both before and after he went to Westfield. He asked my opinion about it, about its varying from the other machine. He did this at the time when Mr. Bosworth hired him to go to Westfield.

(Two last sentences of this answer objected to.)

Int. 74. Did you about that time have any conversation with Mr. Allen Goodman about Mr. Oaks's machine? If so, state what it was, and when and where it occurred.

Ans. We had some talk about it at several different times, and I should think both before and after Mr. Oaks went to Westfield. I should think that the most of the talk we had was since. I recollect he said he thought it was a pretty good invention, and that he thought Oaks would make something on it, and he was in hopes he would. I asked him if he thought it would infringe on the Dana machine. He said he rather thought it wouldn't, as they differed so much in the make of them. Then he referred to the Dana machine, and said the patent on that laid in the raising and falling the cutters with the gear, and also cutting out whatever it made like the pattern, while the Oaks machine raised and lowered the cutters of its own accord while the work was passing through, and the patterns to Oaks's machine were a good deal larger, and not shaped liked the work it was cutting, and those two parts that I have spoken of being patented were so different, that he thought it wouldn't infringe on the Dana machine patent. Then he referred to his machine that had a cam motion. He thought in that respect that the Oaks machine was similar to his in principle, but the Oaks machine was an improvement on his. The talk that I refer to now, that I recollect the most of, was in my shop at Dana, and I think it was after Mr. Oaks went

to Westfield. He said he had known Mr. Oaks's principle for some little time before, as he had counselled with him.

(Whole answer objected to.)

Int. 75. Did he express any opinon at that time, as to whether his cam machine was an infringement on the Dana machine? If so, state what he said, and if he made any comparison between the cam machine and Mr. Oaks's machine, as to their being an infringement of the Dana machine, state what he said.

(Objected to.)

Ans. He didn't say anything to my recollection, that he
221 thought it infringed, at that time. He spoke of Oaks's machine being similar to the cam machine, as I stated before.

Int. 76. Did Mr. Goodman ever propose to sell you the cam machine patent, or any interest in it?

(Objected to.)

Ans. At the time he and I was in company, before we took this contract of Stimpson & Doane, he tried to sell me one-half of the machine, and of the privilege of running it, and I think he spoke about selling me the whole, if I would buy it

Int. 77. Did he, when proposing to sell to you, express any opinion as to whether that machine was an infringement upon the Dana machine? If so, what was it?

(Objected to.)

Ans. I asked him if I bought part, or all of it, if the other company wouldn't find fault if I went to making legs on it. He said they wouldn't, as it was different from their machine, and didn't infringe on it.

Int. 78. Did he say anything to you at any time about Oaks going to Westfield, or about having talked with Oaks upon the subject? If so, state what he said.

(Objected to.)

Ans. I think he told me he had had some talk with him about going to Westfield. He said he was sorry to have him go, but he thought he would do better there than he would at Dana. He thought the Dana company hadn't done just as they ought to by him, and he didn't know as he blamed Oaks for going to Westfield.

Int. 79. Did he say anything about having advised him as to going there? If so, what did he say?

Ans. I think he said Oaks asked him his opinion about going, and I think he said he advised him to go.

Int. 80. When he said he had counselled with Oaks about his machine, did he state as to what he had counselled him? If so, state what he said.

(Objected to.)

Ans. In all our conversation at that time and others, it was in regard to those two carriages, one running faster than the other, so as to raise and fall the cutters automatically. Those were the principles that he spoke of, so that I supposed those were the parts he counselled upon.

Int. 81. In any of the other conversations which you had with him,

did he express any opinion as to the Oaks machine being an infringement of the Dana machine? If so, state what he said.

(Objected to.)

222 Ans. I have no knowledge of his speaking of the Oaks machine infringing on the Dana at that time or any other time, till about the time this suit was commenced.

Int. 82. At the time when Oaks was making his arrangements to go to Westfield, or before, did you entertain the idea yourself of going there, and did you have any talk with Mr. Goodman upon the subject of going there?

(Objected to.)

Ans. I did think of going there. I think I have talked with Mr. Goodman about it.

Int. 83. What conversation did you have with him about it?

(Objected to.)

Ans. I can't exactly call to mind the conversation I did have. I was speaking mostly about selling out my shop and privilege to the leg company then. I think I had some talk with him about it, but can't recollect what it was.

Int. 84. Did he express any opinion about your going to Westfield? If so, what was it?

(Objected to.)

Ans. He did some, but I can't call it to mind now.

Int. 85. Have you recently made a working machine like those you made at Wendell in 1840, for making handles? If so, will you produce it as an exhibit in the case?

Ans. I have.

(The witness here produced the machine marked "Wheeler No. 3, H. F. S, com.," in two pieces marked A and B.)

Int. 86. Is this machine which you now produce like those which you made in 1840, in all respects, or not?

(Objected to as leading.)

Ans. The first one I made I nailed and screwed it together. I found this was not strong enough, then I glued one together. This was stronger than the other, but after using it it would split and break, and I couldn't alter it to make different sized handles. I then got some bolts made, and made one like the exhibit now produced. I found this to be much handier, as I could loosen the long bolts and slip the sides or pattern up or down, and thus make the handle larger or smaller; or if I wanted to make a different shaped handle, I could take the two sides or patterns off and slip the new ones in. These changes in the mode of constructing the machine were all made within a short time of each other.

Int. 87. In making handles, how was the piece of wood prepared before it was put into this machine to be planed?

Ans. It was turned in a lathe a little larger than the size of

223 the handle after it was cut, measuring it through the corners. The shape of the handle, except that it was round, was the same before as after planing. It had the same longitudinal profile.

Int. 88. In making legs upon the Dana machine, and also upon your machine, how is the timber prepared?

Ans. In the same way—turned out before being cut. Has the same longitudinal profile before it is cut or planed that it has afterwards.

Int. 80. Have you made any handles upon this machine which you now produce? If so, will you produce them as exhibits in the case?

Ans. I have. (The witness here produced the exhibits, 5 chisel handles, marked "Wheeler, H. F. S., com'r.")

Int. 90. How does this work compare with handles which you made in 1840, or afterwards, as to shape and the perfection of the cutting?

Ans. The shape, I should think, was very much like some, but I made a good many different shapes. The cutting of these is not near as good, as the cylinder run much slower than I run it at that time. I had no lathe in the shop that was speeded right for the business.

Int. 91. Of what timber are pianoforte legs generally made?

Ans. Veneered ones of chestnut; carved legs are made of different wood.

Int. 92. How does the cutting of the chestnut handles which you have produced compare with the general cutting of legs for veneering?

Ans. Those are smoother than the legs are generally on the Dana machine.

SATURDAY, *Aug.* 27, 1864.

Int. 93. You stated, in a previous answer, that in making legs the work was prepared for the planing machine by being turned to the proper form in the longitudinal outline. Will you state whether this has always been so; and if, in your experience, you have prepared the work in any other way, will you state what it was?

Ans. When I first began I used to saw them out with a jigger saw.

Int. 94. Into what shape were the legs brought by this process, and what difference was there in the amount of cutting required by the planing machine?

Ans. They were sawed out eight-square and sometimes four-square, and then turned the corners off with common lathe. They were sawed out in the shape which it was designed for the leg to have, leaving about an eighth of an inch in thickness to be taken off to bring them to the finishing size. There is not so much to be cut away when they are sawed in this way as when they are turned.

224 Int. 95. If you ever had this work done by the job or the piece, state what price you paid for it, and what was included in the work.

Ans. I paid the man fourteen cents a set, and I think we blocked them off and set them out, all for that, but I am not certain about what he did; I am sure about the price.

Int. 96. How long did you practice this method?

Ans. I think from one to two years from the time I began the leg business at Dana.

Int. 97. Since the last adjournment have you prepared a model or duplicate of the machine for making handles described in your answer to the 20th interrogatory? If so, will you produce it to be marked as an exhibit in the case?

Ans. I have. (The witness here produced the model marked "Wheeler No. 5, H. F. S., com'r.")

Int. 98. Will you state how far this corresponds with the original machine, and whether it represents the lathe as well as the part described in your twentieth answer?

Ans. It is as near a representation as I could make of it, only on a smaller scale; it represents the lathe as well as the machine.

Int. 99. If there are any parts represented which were not described in that answer, will you point them out, and state whether or not they were used in connexion with the machine you described? and if not, will you state how they were used, and how much?

Ans. I did not describe the lathe which is represented in the exhibit. The carriage part is all correct as I could make one; the movable piece marked *a* in the exhibit was not described by me in my answer, and it was not used in connexion with the parts described in my answer to the twentieth interrogatory; that part was used when I passed the carriage over the cutter by hand; it was moved along on the cylinder to the desired point, and there fastened by the key at the bottom, and then furnished a guide to keep the work in the desired position while passing over the cutters; it was used most of the time while cutting chisel handles, or anything else which I cut by passing the work over the cutter.

Int. 100. Will you state the circumstances under which the several models which you have produced were made?

Ans. Model marked Wheeler No. 1, 1840, in pieces A and B, H. F. S., com'r, was made by me at Orange, at the request of respondents' counsel, who asked me to go home and make it as quick as I could, and see if I could find any pieces of the old original, and to return back at once, as he was in a hurry to go on with the case; the model marked Wheeler No. 2, H. F. S., com'r, in two pieces
225 marked *a* and *b*, was made in Orange, by the direction of respondents' counsel to make them, and return back as soon as I could make them; the model marked Wheeler, No. 3, H. F. S., com'r, in two pieces, *a* and *b*, was made in Orange by the direction of the same counsel; he wanted me to make one as nearly like the original one in size and strength as I could, and cut out some handles as nearly like the handles I used to cut as I could, and bring them to him as soon as I could do it, as he was in a great hurry for it. The two models Nos. 1 and 2 I was asked to make shortly before the time when I commenced to give this deposition; the model Wheeler No. 3 I was requested to make a few days before I resumed this deposition, on June 21st.

Int. 101. Have you since the last adjournment planed, or assisted in planing, any legs upon the machine marked Wheeler No. 4, A and B? If so, will you state how far the process of planing by those machines agrees with or differs from the process of planing handles,

as you have previously described it, on the machines you had at Wendell? Describe the manner in which the legs were planed with those machines.

Ans. I have. The manner of the two operations was as nigh as I could make it; I cut the legs in the same manner that I cut the handles. The first legs were cut with the machines marked Wheeler No. 4, A and B, used in connexion with each other, and with the wooden spring No. 4, C, affixed underneath the part B, a pin passed up through the hole in the piece B, one end of which rested on the end of the spring, and upon the other, the end of the carriage piece A rested; this carriage piece was fastened on by screws between the two swinging arms attached to the part B. At this time the side handles now on the piece A were not upon it.

(At this point, at the suggestion of counsel, the deposition of Mr. F. A. Peckham was read to the witness, and he said that the description of the machines used, and of the manner of using them, were correctly given by Mr. Peckham.)

Adjourned.

JANUARY 18, 1865.

Examination resumed:

Int. 102. Will you state what your judgment is as to the practicability of using machines constructed in the manner described by Mr. Peckham in the manufacture of pianoforte legs, and how they would compare in the manner of doing the work and in the rapidity with which it could be done, with the Oaks machine or the Dana machines?

226 Ans. I think it is more practical, and will do them faster and better, than either the Oaks or Dana machines; I refer to the machine which was used with the carriage running under the cylinder; I consider the use of the machine by running the carriage by hand over the cylinder as a practical mode of using it, and a strong man could cut as many legs in this way as with either the Oaks or Dana machines, but a weak person could not, in my opinion, handle the frame with a heavy leg in it. The only difficulty arises from the weight of the frame and leg, and the increase of strength required in consequence. By using the carriage so that one end can rest upon the machine, by the use of arms, in the third manner described by Mr. Peckham, the difficulty arising from the weight is obviated, so that legs can be cut as easy, or nearly as easy, as by the use of the carriage running under the cylinder. In this way a weak man can handle the carriage with ease. I think work can be done as well with this machine, used in either of the three ways, as with the Oaks or Dana machine.

Int. 103. Will you look at the legs marked as exhibits in this case, and testified to by Mr. Peckham as having been cut by him and yourself, and state whether they are the legs which you assisted in cutting, and whether they were cut in the manner described by Mr. Peckham?

Ans. They are the ones, and I should think he was correct in his statement of the manner in which they were cut.

Int. 104. Have you recently seen a machine in Rufus Powers's shop, in Greenwich, for cutting irregular forms? If so, will you state when you saw it, who was present, what the appearance of the machine was, whether you ever saw the machine before, and if so, when, and how far it corresponds with the model of a machine produced by Mr. Powers, and marked Powers No. 2?

Ans. I have; I saw it, I should say, in July last. Mr. Farmer and Rufus Powers were present. It appeared to be an old machine; I have seen it before. He showed it to me soon after I moved from Wendell to Greenwich. He showed it to me at the time when I was at work for him on another machine, which I have previously testified about, and also, I think, at another time previous to this. I went to Greenwich about December, 1843. I should think the model was a correct representation of the machine.

Int. 105. State whether you saw any work done on the machine in July last, and if so, what it was, and how the machine operated.

Ans. I did; I saw the pieces marked as exhibits "Powers No. 4, and No. 5" cut, and I think several others like them. The machine operated well, and the legs were cut right along without any difficulty or delay, and the work shows for itself. I consider it a good quality of work.

Int. 106. Did you ever have any conversation with Allen
227 Goodman about the Hayward machine, so called, which is used in Gardner? If so, will you state when and where such conversation occurred, and what it was?

Ans. I have. It was while the Brooks lawsuit in New York was going on, and was at North Dana. One time, as Goodman and I were going to the mill to work, I asked him why he didn't attend the lawsuit, as he had done before. He said he had been there long enough, and was tired of going there. About the time we got to the mill, he asked me if I wouldn't like to make some five hundred dollars. I said, Yes, if I can. He said then, if any one would go to Gardner and get a model of the Hayward chair machine, and present it to Brooks, and state the particulars about it, he had no doubt but that he could have five hundred dollars. I think he said that that would decide the case at once. I am not sure about the words used, but he said something to that effect. I replied that I didn't want to do anything to injure us there at home. I think I said, "even if I could get good pay for it." He said, I don't know *know* as I should want to myself.

Cross-examination:

Cross-int. 1. Did you ever hear it suggested that the reply of complainants in this case to the chisel-handle machine of your own produced in defence, and represented by the model marked Wheeler No. 1, might be that such an apparatus for use for cutting piano legs would require some provision for preventing lateral twist or slip of the carriage as it advanced over the cutting cylinder.

Ans. I don't seem to recollect of hearing any one make such remarks.

Cross-int. 2. Have you never heard it suggested that some such provision would be necessary or desirable in the use of such an apparatus sufficiently enlarged to cut piano legs?

Ans. I can't say that I have.

Cross-int. 3. How were you paid for the machine on the plan of the model "Stimpson No. 2," which you say you built at Orange in 1863?

Ans. I was paid in paper money—in bank notes. That is my impression. I may have been paid by a draft.

Cross-int. 4. If you do not remember which way it was, do you remember from whom you received the payment?

Ans. I should say it was from George Stevens.

Cross-int. 5. Why have you hesitated so long to answer that question?

Ans. Because it has partially slipped my mind.

Cross-int. 6. Can you name any fact now from which you
228 should say it was Mr. Stevens, except the fact that you have heretofore spoken of it as built for him?

Ans. The reasons why I state it so is, that when I was at Westfield, after getting the machine done, Mr. Stevens said to me (counsel for complainants objects to this line of answer as incompetent, and not responsive) that it was all right, and suited him, and that he would send the money in a few days. Mr. Stimpson, I think it was, said he wanted to send some in a few days to pay to his uncle Seth Stimpson, and some to pay to Mr. Tenney, if I remember right, and I think now some other parties, and they would send it all together, and he wanted I should take the trouble to pay it out to those several places. I think there was some in the lot coming to me from Stimpson in the package, or check or draft. There was a bill came with the draft or package stating what to do with the amount of money on the draft. I paid it out to those several places according to his order, and I think that of Mr. Stevens came in that lot or in that draft.

Cross int. 6. Was not the money for all these payments, including your price for the machine, included in a check or draft of Mr. Stimpson, or Stimpson & Co., to the best of your recollection?

Ans. I should think it was.

Cross-int. 7. When was this payment made?

Ans. I can't recollect the time. I should think within two or three months from the finishing of the machine.

Cross int. 8. So far as you know, or have reason to believe, is there any part of your chisel-handle machine, which you say you made in or about 1840, now in existence anywhere?

Ans. I could not say; I have not seen any of late.

Cross-int. 9. When and where did you last see any part of that machine to your knowledge, and what was such part?

Ans. I saw the cylinder at Dana; can't set the time; some time between my going there and being burnt out. I moved to North Dana

in the spring of 1851. I moved to Orange in the first part of the year 1857, soon after I was burnt out.

Cross-int. 10. Is there any chisel-handle, or other similar piece of work made upon that machine, which is now in existence to your knowledge?

Ans. I don't know of any.

Cross-int. 11. When and where did you last see any to your knowledge?

Ans. I had some remaining ones on an old set of former chisels at Dana when I was burnt out. These are the last that I recollect of.

Cross-int. 12. Did you keep any book at Wendell showing your sales of articles made with that machine?

229 Ans. I did not.

Cross-int. 13. Can you name any person or persons now living to whom you sold any chisel handles, or similar articles, made on that machine?

Ans. Yes, Amasa Dexter. I sold to others, but whether they are alive or not I cannot tell.

Cross-int. 14. Have you made any search for any parts of this machine, or any of the carriages intended to be used with it, since this deposition was commenced? If so, where and when, and with what result?

Ans. I have; in Greenwich, Orange, and Wendell, I think, somewhere in the week preceding March 16, 1864, the time when I commenced to give my deposition, and from time to time since, as opportunity presented. I have not as yet found anything.

Cross-int. 15. Have you made more than one search at Greenwich?

Ans. I don't know as I have.

Cross-int. 16. With the exception of the cylinder which you say you saw at Dana before you were burnt out, do you know that any part of that machine was taken away from Wendell?

Ans. I think I have seen some of the carriages at Greenwich.

Cross-int. 17. What became of those parts which were left at Wendell and at Greenwich?

Ans. That is more than I can tell.

Cross-int. 18. What did you take any of the carriages to Greenwich for?

Ans. If I carried them there I did it for the sake of preserving them for further use.

Cross-int. 19. What was all the business you did while you lived in Wendell?

Ans. I built some furniture, some buggies, some parts of sleighs, cart-wheels, made some doors, built parts of saw-mills, and shingle-machine works, ironed all those carriages, painted and trimmed them, and a good many other small things which I don't think of. I turned a good many handles of different kinds, and made some eight-square ones. Carried on a farm. I built some houses and barns.

Cross-int. 20. Did you do about the same work at Greenwich while there which you had done at Wendell?

Ans. No.

Cross-int. 21. State what sort of work you were engaged in at Greenwich.

Ans. I carried on a farm, made steel rakes, California picks, and did various other kinds of blacksmithing, built one house, and worked out some at the joiner's business, besides built some water-wheels and some small lots of machinery. My principal business was farming and blacksmithing.

230 Cross-int. 22. Could you make good chisel handles on the machine you had at Wendell for that purpose, without using any guards to keep the carriage from twisting or slipping laterally.

Ans. I could.

Cross-int. 23. Are chisel handles ever veneered?

Ans. I never saw any that were.

Cross-int. 24. When did you first know of the Hale and Goodman piano-leg machine, so called, that is, the machine which they patented in 1845?

Ans. It strikes me it was about the last of my living in Wendell or first of my living in Greenwich.

Cross-int. 25. That was at the time the machine was first put in use, or soon after, was it?

Ans. I could not say as to that how long it had run. I should have the impression that it was not a great while after.

Cross-int. 26. You have spoken of the contract you had for cutting legs with Stimpson & Doane, or their successors, at $2 25 a set. How long did that contract last, and about how many sets did you cut under it?

Ans. I worked under the contract for, I should think, three years, more or less. The contract called for twenty-five sets a week. Sometimes I didn't cut that when the water was dry, and sometimes I cut a little over.

Cross-int. 27. How much profit did you make on twenty-five sets at $2 25 a set, clear of all expenses?

Ans. I wanted that it should average fifty cents a set; it depended on my buying my lumber and other materials. I calculated that it did average about that. I had a saw-mill for other work, and worked up my stuff more economically than the other folks did, I think.

Cross-int. 28. Is Mr. Doane, of the firm of Stimpson & Doane, now living?

Ans. No, sir. He died some ten or eleven years ago, I should think.

JANUARY 19.

Cross-int. 29. How much faster could you make chisel handles by your Wendell machine than they could be made by hand?

Ans. I could make from ten to fifteen while I would be making one the other way, of the same quality of work.

Cross-int. 30. Please state more exactly, if you can, when you first saw or knew the construction of the Hale and Goodman machine, which they started at Dana in 1844 or 1845.

Ans. I should think it was during the latter half of my living in

Greenwich. I can't fix the time exactly. I went to Dana to get Mr. Goodman to fix a broken saw arbor. I had some talk with him
231 about the Hale & Goodman machine, as he was getting up another one of a different kind at that time. If I remember right, it was his so-called cam machine. He described its operation in part, and spoke of the difference between that and other machines.

Cross-int. 31. Is either Mr. Charles N. Powers or Mr. Stephen Oaks now living?

Ans. Charles N. Powers is alive, I expect; Mr. Oaks is dead.

Cross-int. 32. What were your circumstances during the ten years that you resided at Greenwich?

Ans. When I left there I had about fifteen hundred dollars, the most of which I had accumulated during my stay.

Cross-int. 33. State about how much you made per annum out of the sort of business you were engaged in during your residence in Greenwich.

Ans. My income during that time I should say fell short of eight hundred dollars a year; some years I made a little something, and some years I ran behind-hand.

Cross-int. 34. You say you and Mr. Goodman commenced business together about February, 1852, carrying on a saw-mill and grist-mill and getting out some spokes. How long did you carry on this sort of business together?

Ans. I should say for a year or two; I should have to refer to the deeds to fix the time.

Cross-int. 35. What machine did you use for making spokes during that time?

Ans. We didn't finish any spokes at that time; we sawed them out.

Cross-int. 36. In your answer to the forty-first direct interrogatory, you say that after you and Mr. Goodman dissolved, and after using the leg machine alternately for some time, you obtained Stimpson's consent to your building a machine like theirs, and did so. Who paid for this machine that you so built?

Ans. I paid for it myself.

Cross-int. 37. What did it cost you?

Ans. I made the patterns, and gave Stephen Heald, of Barre, $100. The patterns cost me about $12 to make them. I don't know but he might allow me a little something out of the $100 which I think I paid him, for furnishing patterns.

Cross-int. 38. What became of this machine?

Ans. I afterwards sold it to the Dana company, which, I believe, at that time was Johnson, Stimpson & Co.

Cross-int. 39. Was the machine which Stimpson and Doane
232 furnished to you and Goodman to cut legs by contract upon, built for the purpose, or was it one which they already had?

Ans. There were two machines furnished us for cutting legs; one for cutting sweep legs; I suppose they had them both on hand.

Cross int. 40. You say you built a new machine in the place of that which you sold to Johnson, Stimpson & Co., and used this new

machine at Orange for three or four years. What sort of work did you do on it?

Ans. I made pianoforte legs, melodeon legs, and billiard-table legs, and some stair posts.

Cross-int. 41. Did you use it under the right which you obtained from them at the time of the cancellation of your contract with them, and under the same restrictions as to your use of it which made part of the agreement of cancellation as mentioned in your fifty-first answer?

Ans. I did, with the addition of one or two jobs, which I did for the Dana company, at so much a set.

Cross-int. 42. Were these four-square or eight-square legs, and were they ogee legs?

Ans. Some were four and some were eight-square legs when sawed; they were all eight, ten, or twelve square when finished; they were all what we call machine legs.

Cross-int. 43. What is your present business?

Ans. I don't know now as I can say I am in any particular business; I get up some machinery, and do some other jobs of various kinds for others, as I am employed.

Cross-int. 44. Since you commenced giving this deposition, which was March 16, 1864, have you sold out the machine business in which you were then engaged?

Ans. I have.

Cross-int. 45. To whom?

Ans. I can't call their given names; some Fletchers, of Athol, bought the most of my machinery; I sold some of it to other people.

Cross-int. 46. When did you so sell out?

Ans. I should think some time last spring, reserving the machinery for my own use for some months.

Cross-int. 47. Have you any arrangements made, or in progress, for going into any other business at any future day?

Ans. I have none made nor in progress.

233 Direct resumed:

Int. 1. If you gave Mr. George Stephens a receipt for the money paid you for the machine, state when and where you gave it and the circumstances.

Ans. I did; I can't fix the date, but it was some few months after I finished the machine; it was at Westfield; I was looking the machine over and asked him if it suited him; he said (objected to) it was all right, and he would send me the pay in a few days. I told him I would make him out a bill and receipt it, and leave it with Horace Stimpson, and if he sent the money to me with the Stimpsons, or any other way, to show Horace at the time what he had done, and he should give him up the receipt upon his sending the money.

LYMAN WHEELER.

Deposition of Cephas Church.

JANUARY 21, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Cephas Church; my age is fifty-five years; I reside in Winchester, Mass., and I am a pianoforte case maker.

Int. 2. Have you ever been engaged in the manufacture of pianoforte legs? If yes, state in what places you have been so engaged, when you first commenced in the business, and how long, and to what extent, you have been so engaged.

Ans. I have; at T. Gilbert & Co.'s, in Boston, and at Winchester, both in this State; I first commenced, I think, in 1839, certainly as early as the year 1840, at T. Gilbert & Co.'s; I was there some eight or ten years; from there I went to Winchester, and have been there ever since, engaged in making pianoforte legs, more or less.

Int. 3. What styles of pianaforte legs were manufactured by T. Gilbert & Co. when you were there?

Ans. What we called a straight cone leg, some eight and some twelve square; after I had been there some years, I used to veneer what was called the machine leg.

Int. 4. Will you state the method of manufacturing the cone legs you have mentioned by T. Gilbert & Co.

Ans. The stock was glued up large enough to make a leg, and then it was put into a lathe, and the ends headed down, then there
234 was an index put on to one end of the lathe, and then the leg was confined in a carriage; this carriage slid past a circular saw, which formed the leg into the required shape.

Int. 5. Describe the use and operation of the index you have spoken of.

Ans. (The witness here produced the exhibit marked "Exhibit Church, H. F. S., examiner," and said:) This was confined on to the end of the leg, by the pin on it passing through the hole in the exhibit, and by the spurs entering the top part of the leg; the iron rim was divided into eight and twelve spaces, by the holes shown in the exhibit, and had a spring with a point or pin on it, which was pressed by the spring into the holes as the leg revolved.

Int. 6. Was the index you have spoken of used by Gilbert & Co. when you first went there to work?

Ans. So far as that, I couldn't swear that it was; but when I had occasion to use it, I found this there; I mean by this the iron rim shown in the exhibit, the wooden part having been worn out by use, and a new one put in.

Int. 7. How soon after you went to T. Gilbert & Co.'s did you use this index?

Ans. I think it must have been two or three years after I first went there.

Int. 8. Was the index new when you first used it?

Ans. No, it was not.

Int. 9. Are you acquainted with Warren Hale, the complainant in this action?

Ans. I am.

Int. 10. State how long you have known said Hale.

Ans. Twenty years, certainly.

Int. 11. What was the business of T. Gilbert & Co. when you were with them as you have stated?

Ans. Manufacture of pianofortes.

Int. 12. Do you know of said Hale's being in the employ of said T. Gilbert & Co.? If yea, state when he was in such employ, and how you knew it.

Ans. I knew his being there from his saying so to me; he left before I went there.

Int. 13. Have you ever purchased piano legs for veneering of said Hale? If yes, state when and how you came to do so.

Ans. I have purchased legs of him; I couldn't state when exactly, but I have had them for years; I purchased them of him, and veneered them, because I could make a profit on them.

Int. 14. Did you purchase them of said Hale at a reduced price? If yes, state how that happened.

Ans. I did; I said to him that I could get up a machine and
235 get out my own legs; he agreed to furnish them at a certain specified price, and for that reason I did nothing about a machine.

Int. 15. Have you in your business hired persons to veneer piano legs for you? If yes, state what prices you have at different times paid.

Ans. Yes, I have hired the legs veneered. The prices have varied, because the work on different patterns of leg varied. It is my impression that I paid six dollars a set for one pattern and eight for another, for veneering.

Int. 16. Did you pay said prices of six and eight dollars for legs which you purchased of Hale or similar legs?

Ans. I did.

Int. 17. Have you seen an index or indexes used by mechanics for the same or similar purpose for which you have used the abvoenamed index? If yes, state when and where.

Ans. I have. I have seen it used at Amherst for the purpose of boring hubs. My father was a wheelwright, and he used an index, it would be safe to say forty-five years ago. I stayed at home until I was two and twenty, and this index was used right along. I have seen it used in machine shops along in 1836, '37, and '38, at Worcester, for cutting gears in wheels. The holes in the indexes I saw at Worcester were on the side, instead of on the periphery of the index-plate.

Cross-examination:

Cross-int. 1. Describe fully and particularly the machine used by T. Gilbert & Co. for making cone legs.

Ans. The machine was a carriage which the leg was confined in, which slid on wooden grooves past a circular saw. The index was fastened on to the end of the leg, as I have described before. The circular saw was on a table and used for all kinds of sawing.

Cross-int. 2. How were these legs afterwards prepared for veneering?

Ans. After being sawed to the shape, they were planed by a hand-plane to make them smooth.

Cross-int. 3. Did they have caps and feet? and if so, were they separate from the leg, and how were they made?

Ans. They had caps and feet separate from the leg, and they were turned.

Cross-int. 4. Do you know who made that machine?

Ans. I do not.

Cross-int. 5. What time was it when you paid six and eight dollars a set for veneering?

236 Ans. I couldn't tell without referring to my books. I think it was along in 1845, about that period.

Direct, resumed:

Int. 1. Have you continued to use that index up to the present time? and if so, for what purpose?

Ans. I have, for the purpose of giving the right form to the legs. I mean both plain and fluted cone legs.

Cross, resumed:

Cross-int. 1. Have you ever made any machine legs? If so, how many, and on what machine?

Ans. I never have.

CEPHAS CHURCH.

Deposition of Charles Phipps.

JANUARY 24, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. Charles Phipps; my age is 54; I reside in Ware, Mass.; I am a dealer in musical instruments.

Int. 2. Will you state what relation you are to Charles N. Stimpson, of the firm of Stimpson & Co., Westfield?

Ans. He married my daughter.

Int. 3. State, if you know, whether you were at his house in Dana, about the time of the time of the Westfield purchase?

Ans. I was.

Int. 4. State whether he went to New Salem, either just before or while you were there; and whether he returned while you were there.

Ans. He went before I got there, and returned while I was there.

Int. 5. Did yon stay there over night? and if so, with whom did you stay, and at what time did Mr. Stimpson return to Dana?

Ans. I stayed over night with Mr. George T. Johnson. He returned about noon the day after I went there.

237 Int. 6. Did you know of his going to Westfield the following day, with Mr. Fales?

Ans. I knew of his going to Westfield, and that Mr. Fales went there, whether they were in company or not I do not know.

Int. 7. After Mr. Charles N. Stimpson returned from New Salem, and before he went to Westfield, did you know of his having any conversation with Mr. George T. Johnson? If so, what were the circumstances?

Ans. I knew of his having conversation. Mr. Johnson called at Mr. Stimpson's house, and wished to see him, and he went out with him.

Int. 8. How far was Mr. Stimpson's house from Mr Johnson's store?

Ans. I should think perhaps thirty or forty rods.

Int. 9. Did you know when Mr. Stimpson returned from Westfield? If so, who returned with him? Were they at your house, and how did they go from your place to Dana?

Ans. I did. Mr. William N. Oaks returned with him. They were at my house, and I carried them to Dana.

Int. 10. If you heard any conversation between them, in reference to the Westfield purchase, or in respect to what either of them proposed or desired to do in reference to that purchase, will you state what the conversation was, giving the language, if you remember it? If not, giving the substance of what they said, and state where the conversation occurred?

(Objected to.)

Ans. I heard conversation relating to it at my house, and on the way to Dana. Mr. Stimpson desired to have the Dana company take the purchase off of his hands--said to Mr. Oaks he was going there for that purpose. Mr. Oaks objected at each of the times that it was named by Mr. Stimpson—didn't wish Mr. Stimpson to go out of it. That is the substance of the conversation. It was repeated during the ride several times.

Int. 11. Did Mr. Oaks give any reasons why he didn't wish Mr. Stimpson to go out? and if so, what were they?

(Objected to.)

Ans. There were reasons given, but it is so long since I am not able to recall them.

CHARLES PHIPPS.

238 *Deposition of William N. Chamberlin.*

JANUARY 27, 1865.

Int. 1. What is your age, name, residence, and occupation?

Ans. My name is William N. Chamberlin; am 43 years of age; I reside in Westfield; I am a baker.

Int. 2. Have you been engaged in the manufacture of piano forte legs in Westfield for the defendants in this case and others? If so, when, and for whom, and in what capacity?

Ans. I have. It is about six or seven years since I left the business. I commenced, I should say, nine years ago this last July—it may be ten years—for Bosworth & Loomis. I had a job of cutting piano and melodeon and billiard legs. I was their foreman in that department. I worked for them while they carried on the business; couldn't say whether one, two, or three years. I then worked in the

same capacity for Stimpson & Oaks, for I should think, about a year, and then I left the business.

Int. 3. Are you acquainted with what is called the Oaks machine? and if so, when did you first become acquainted with it? and please describe it sufficiently to identify it.

Ans. I am. I first became acquainted with it about nine years ago. It is a machine for cutting piano and melodeon legs, and it works by——

(At this point counsel for complainants admitted that the machine in question was like the one represented in this case by the model marked "Stimpson, H. L. H., U. S. com'r.")

Int. 4. Was there a lever used in the operation of that machine? If so, describe the lever and its uses.

Ans. There was. It is attached to the cylinder frame for the use of raising the cylinder frame, so that the carrirge can be run back.

Int. 5. Was it used for any purpose whilst the cylinder was in motion for cutting?

Ans. No, sir.

Int. 6. Was it used for any other purpose than the one which you have already stated?

(Objected to.)

Ans. No, sir.

Int. 7. Did John F. Chamberlain and Alpheus J. Nye work for you in this department during any part of the time above mentioned and if so, did they operate this machine?

Ans. They did, and they operated the machine.

239 Int. 8. From what place, and from what employers, did they come when they came to work for you?

Ans. They came from Dana. I could not say in whose employ, but from the piano leg factory at Dana. I can't say that Chamberlain had worked in that shop before he worked for me, but think he did. I know he has worked there since. I think Chamberlain was at work in the Westfield shop when I hired him.

Int. 9. Did you notice in what manner they made use of the lever described above, when they first commenced running the machine?

Ans. Yes, sir. Mr. Nye would keep his hand upon the lever. I supposed the reason was because he had been used to running the machines at Dana, which required both hands. I asked him why he kept his hand upon the lever. He said it was natural for him to keep his hand there, because he had used a machine which required both hands. Mr. Chamberlain used it a good deal in the same way, but not so much so. I told them both repeatedly that it was not necessary.

Int. 10. Did you tell them what effect the use of the lever, when the cutters were running, had upon the work?

Ans. Yes, sir. The effect would be that the least heft in the world put upon the lever would leave ridges in the work.

Int. 11. What reply did they make when you objected to this use of the lever?

Ans. They would say I won't do it; I will keep my hands off.

Int. 12. Did you ultimately succeed in breaking up this habit on their part?

Ans. Not entirely.

Int. 13. What effect did the use of any pressure upon the lever actually have upon the work?

Ans. If you kept any heft upon the lever, it would jar and make wrinkles in the work. It needed just the heft of the frame to make it work well. If they kept their hands on, they would be obliged to run the work through again.

Cross-examination:

Cross-int. 1. Did you ever cut legs yourself upon that machine—I mean by the day?

Ans. Yes, I believe I have.

Cross-int. 2. For how long a time did you cut legs regularly, day after day, on that machine.

240 Ans. I could not tell you. Should think I had cut them right along for two or three weeks at a time—perhaps longer and perhaps not so long. I mean by the day. When I had the business in my own hand. I have cut right along for a year.

Cross-int. 3. Do you mean us to understand that you never, in cutting any kind of legs, used the lever to ease the cutters up the curves of the legs?

Ans. I do.

Cross-int. 4. Do you mean us to understand that that is the habit of workmen who cut legs upon that machine, except Nye and Chamberlain?

Ans. I can't say what is the habit of others.

W. N. CHAMBERLIN.

Deposition of Frank W. Chamberlin.

JANUARY 27, 1865.

Int. 1. What is your age, residence, and business?

Ans. I am twenty-four years of age. I reside in Westfield. I am a mechanic.

Int. 2. Have you worked on the manufacture of pianoforte legs, and used what is called the Oaks machine? If so, when, where, and for whom?

Ans. I have. I began to work on it about six years ago, and the last work I did on it was in 1862. I worked first on the machine for Stimpson, Oaks & Co. I worked in the room with it before that, for Bosworth & Loomis, at Westfield.

Int. 3. Was there a lever connected with the machine? If so, describe it. and how it was used.

Ans. There was one used for raising the cylinder after cutting through one square on the leg, so as to let the carriage run back and turn the leg over for another square.

Int. 4. Was it used, or was it useful, according to your knowledge, for any other purpose?

Ans. No, sir.

Int. 5. What effect did the use of the lever have upon the leg when the cutter was in operation?

Ans. If you left it alone it would cut it smooth, and if you put your hand on it, it would leave ridges on it.

241 Cross-examination:

Cross-int. 1. How much of ridges were these, large enough to interfere with the veneering?

Ans. They were.

Cross-int. 2. Then you don't believe it possible to cut a leg on that machine so that it can be veneered, unless you leave the lever alone while cutting it, do you?

Ans. It might be veneered, but it wouldn't be good. It would be left so that when the scrapers came to scrape the leg these ridges would be there, and they would scrape through into the wood.

Cross-int. 3. Do you know Alpheus J. Nye and John F. Chamberlin? If so, what kind of workmen are they?

Ans. I know them. They are considered pretty good workmen, I believe.

Cross-int. 4. Do you believe that they would cut legs habitually that could not be veneered or scraped without scraping through the veneer?

(Objected to.)

Ans. Such things as that have been done. I have heard my father speak to them about such things—about the legs being reported ridgy.

Cross-int. 5. What is the weight of the frame which carries the cylinder cutter?

Ans. I couldn't tell. I should think the purchase on a lever might be a couple of hundred pounds.

Cross-int. 6. Do you use both hands, or only one, to turn the crank which drives the carriage?

Ans. Sometimes both, and sometimes only one. As a general thing one hand will turn it. In going up some steep places it is necessary to use both hands to run the carriage steady.

Cross-int. 7. Have you ever seen any other men cut legs in that machine? If so, give their names and places of residence.

Ans. I have seen my father cut legs on it; Mr. Nye—I don't know where he lives; J. F. Chamberlin, of Dana. I believe that is all.

Cross-int. 8. Do you know that both Mr. Nye and Mr. Chamberlin habitually used that lever to ease the cutter up the steep inclines?

Ans. I have simply heard them say that it was a habit; that they had worked upon other machines in that way.

Cross-int. 9. Do you mean to swear that you heard each of them say this?

Ans. Yes, sir.

FRANK W. CHAMBERLIN.

242 *Deposition of F. M. Peckham.*

JANUARY 27, 1865.

Int. 1. Have you before testified in this case?

Ans. I have.

Int. 2. Did you make a model of what is called the Wheeler chisel-handle machine, to be used in this case, and marked Wheeler No. 5?

Ans. I did.

Int. 3. Have you made a machine for practical use according to the same model?

Ans. I have.

Int. 4. Have you ever put that machine into practical operation? If so, when, and where, and for whom?

Ans. I put that machine into practical operation for Stimpson & Co., in their factory at Westfield. I cannot give the date. I should say three or four months ago. Say the last of September or the first of October.

Int. 5. Are there any facts by which you can state more nearly than that, growing out of the condition of the weather, or any other facts?

Ans. I don't seem to think of anything now.

Int. 6. Do you mean to say that you made the machine for Stimpson & Co. personally, or for some other person?

(Objected to.)

Ans. The machine was made by the request of George W. Stevens, to his order and to suit him.

Int. 7. State whether it was made in conformity to the model above referred to?

Ans. The machine is made as nearly like the model as I could make.

Int. 8. State the practical operation of the machine—how it works—the quantity and quality of the work it turns out.

Ans. The machine makes good work. The machine has worked with less labor than the old Oaks machine, and I can make more work with it.

Int. 9. How does the work compare with the work of the old Dana machine?

Ans. It makes as good work as the Dana machine.

Int. 10. State whether Mr. Stevens has had it in regular and constant operation since it was built.

Ans. I should say he had.

Int. 11. Have you worked the machine yourself personally?

Ans. I have.

243 Int. 12. Are you acquainted with what is called the Oaks machine?

Ans. I am.

Int. 13. Have you ever run that machine?

Ans. I have.

Int. 14. Has it a lever attachment? If so, describe it and its use.

Ans. It has a lever about 2½ feet in length, used for the purpose of

raising the cylinder and rollers off of the pattern, so that the carriage with the leg would run back.

Int. 15. Was that lever used or useful while the cutter was in operation?

Ans. No, sir; I should say not.

Int. 16. Do you know of any other practical use for that lever except to raise the cylinder and fasten it up when the carriage was running back?

Ans. I do not, of any other use.

Int. 17. What would be the effect of any pressure upon that lever whilst the cutter was in operation?

Ans. It would make ridges in the leg.

Cross-examination:

Cross-int. 1. Did you ever know any workman or workmen who did habitually use that lever while the cutter was in operation?

Ans. I do not and never did.

Cross-int. 2. Is the machine you built for Mr. George W. Stevens or Messrs. Stimpson & Co., exactly like the model "Wheeler No. 5,' or are there not changes made designedly on it?

Ans. The machine is like the model, and no changes made. I was told to build the machine like the model, and did so.

Cross-int. 3. Are its proportions similar to those of the model?

Ans. About the same.

Cross-int. 4. What is the length of the ways upon which the carriage runs on the machine, and in the model?

Ans. The length in the machine is about seven feet and a half, I should think. In the model, are twenty-two inches, I believe, if I remember right.

Cross-int. 5. How are those ways supported in the machine? State fully.

Ans. They are laid right on to the flat surface of the frame-work.

Cross-int. 6. Do you mean that they are not supported near their centres only, as in the model, but that they have a flat surface under their whole length?

Ans. I mean the ways rest on the whole length of the frame-work of the machine.

Cross-int. 7. Is there any other difference between the ma-
244 chine and the model? State it, if you know of any, whether you regard it as a substantial difference or not.

Ans. In the model, the timbers upon which the ways are fastened rest across the timbers of the lathe, near their centre. In the machine, these two corresponding pieces are the tops of the frame-work, with a leg near each end of each piece, and those legs are secured together by cross-pieces. The cutter in the machine rests upon two standards, and is about fifteen inches above the ways. The carriage runs the same as in the model, but has a spring under each of the head corners, instead of one in the middle only, as in the model. The carriage which runs on the ways is five feet and two inches long, and has the ratchet-gear fastened to it on the centre of the carriage. That gear is about five feet, a little short of the length of the carriage.

In the model, the cylinder and cutters are of wood; in the machine, the cutters are made of wrought iron, and faced with steel, and the cylinder is of steel or iron. The second carriage, which holds the legs, is held or hung at the foot end of the carriage by two standards of wrought iron, about seven inches in height. The two arms that hold the second carriage are connected to these two standards by means of bolts.

Cross-int. 8. How many legs will this machine make per week, if in regular and constant operation?

Ans. It will make 125 set.

Cross-int. 9. How many legs have been made upon it, since it was first put in operation, as nearly as you know?

Ans. Could not tell; I have not worked at the shop for nearly two months.

Cross-int. 10. Are the index and centres, in the machine, exactly like those in the model?

Ans. They are not. The centres in the model are common wood screws. When I built the machine, I used the two centres which were in use in the Oaks machine, and the index from that machine.

Cross-int. 11. In the operation of that machine, it is necessary, is it not, to use the left hand to press the carriage down, in order to cause the cylinder to follow the pattern?

Ans. We have to use the left hand to press it down, in going over steep inclines, and over a sharp ruffle.

Cross-int. 12. Who assisted you in building the model, and the machine?

Ans. Mr. Lyman Wheeler gave me the plan of the model, as nearly as he could by telling me, and I went to work and built it—the machine. I used my own judgment in getting up the patterns, and built them to suit myself, except the size of the sides to the frame or short carriage that holds the leg. Those, I built to suit Mr.
245 Stevens. He was afraid I would get them too heavy, and stayed with me almost all the time I was getting them out. He was in and out.

Cross-int. 13. Did Mr. Lyman Wheeler give you no drawings to work from?

Ans. I had no drawings to do any of the work by.

Cross-int. 14. Where was this work done? I mean on both the machine and the model.

Ans. It was done at the factory of Stimpson & Co., in Westfield.

Cross-int. 15. Whose tools did you use?

Ans. Mr. Stevens's.

Cross-int. 16. They were in that factory, were they not?

Ans. Yes, sir, in his department.

Cross-int. 17. What kind of power do they use at that factory?

Answer. Steam power.

Direct resumed:

Int. 1. Was there a new centre-pin made afterwards, which the index slipped on to?

Ans. There was a new one made like the other, only a little longer.

F. M. PECKHAM.

Deposition of Charles S. Chamberlin.

JANUARY 27, 1865.

Int. 1. Have you before testified in this case?

Ans. I have.

Int. 2. Do you know the machine commonly styled the Oaks machine, for cutting pianoforte and billiard-table legs, &c.?

Ans. Yes, sir.

Int. 3. How long have you known that machine?

Ans. A little more than eight years, I think.

Int. 4. Is there a lever connected with the working of the machine? and if so, for what purpose is it used?

Ans. There is a lever used for the purpose of raising the frame which holds the cylinder, for to run the carriage back, after cutting the square through.

Int. 5. Is that lever useful for any other purpose in running the machine?

246 Ans. I think not.

Int. 6. Have you ever run this machine yourself?

Ans. I have.

Int. 7. What would be the effect upon the products of the machine if any pressure was put upon the lever whilst the cutters were in operation?

Ans. It would make very imperfect work, according to the heft put upon the lever. It would make the legs ridgy. A very slight weight upon the lever would cause such ridges that, after being veneered, they could not be taken out without much difficulty.

Int. 8. Have you had any practical experience with imperfections of that sort?

Ans. I have.

Int. 9. Describe it, and state whether or not Alpheus J. Nye had any connexion with it, and if so, what, and your means of knowing.

Ans. I had the job of patching and finishing the legs, after they had been veneered. I had a great deal of difficulty, for I should say two or three months, from having ridges in the legs, after scraping, which I had to take out, which made a great deal of work. I called the attention of the company, Bosworth & Loomis, I think, to it. They tried to have it remedied. They thought the fault was in the scrapers, for a while. I got out of patience, and refused to do the work. Then it was charged to the machine. At that time they investigated that, and A. J. Nye was running the machine at the time, and he was instructed what caused it, and how to remedy it. They came better for a while. I blowed them up again on it. Then Mr. Nye's attention was called to it, and he came to my bench He said that he had become so accustomed to use both hands that he couldn't keep his hands off of the lever. He didn't know what to do with his other hand. After that the legs came better, with occasionally a square that he would get ridgy, until they got to coming as good as any machine could cut them.

Int. 10. What was he instructed was the cause of their being ridgy?

Ans. They told him he must keep his hand off of the lever, and that he wasn't running a Dana machine then.

Int. 11. Did Nye himself admit or deny that that was the cause of their being ridgy?

Ans. He didn't deny it. He said that he couldn't think of it. He got so accustomed to it.

Int. 12. Did you hear Peckham's description of the machine made like the model Wheeler No. 5?

Ans. I did, the greater portion of it.

Int. 13. Do you know whether Mr. Stevens has had a ma-
247 chine substantially like that made, and in practical operation at Stimpson's shop in Westfield? If so, how long and how well has it done its work?

Ans. He has. I should say it had been in operation for some three or four months. It has done its work as well as any piano-leg machine I ever worked on. I have worked on considerable many different machines.

Cross-examination:

Cross-int. 1. When did you first learn of the Oaks principle?

Ans. If I recollect right, it is somewhere eight years, near there.

Cross-int. 2. Do you recollect what you testified about your knowledge of that principle, yesterday?

Ans. I think I do.

Cross-int. 3. What was it?

Ans. I testified yesterday what time I went there to work. I didn't know anything about the Oaks principle until I saw the machine.

CHARLES S. CHAMBERLIN.

Deposition of James Stillman.

JANUARY 28, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is James Stillman; am 46 years old; reside in Springfield, and am foreman of the stock department in the Springfield Armory, and have acted in that capacity since November, 1841, and nearly all the machinery now running has been put up since I came here.

Int. 2. Did you see, yesterday, a model of a profile machine, marked Springfield No. 1, and are you acquainted with the operation of a machine of which that purports to be a copy?

Ans. I saw the model, and am acquainted with the machine, which they use at the armory.

Int. 3. What sort of work are you accustomed to do upon that machine?

Ans. We cut out irregular forms. Musket stocks like the exhibits marked Springfield No. 2 and No. 3.

Int. 4. Is that machine capable of doing work upon a larger number of sides? and if so, its capacity in that respect?

Ans. Yes, if you put the necessary fixtures on it.

Int. 5. How many sided work will it then do?

248 Ans. There is no limit to it hardly. You can make as many sides to it as you please, short of making it round.

Int. 6. In order to accomplish this, would it be necessary to change the principle of the machine, or the machine itself?

(Objected to.)

Ans. I shouldn't alter the machine. It is fixtures I should alter, I shouldn't alter the principle of the machine; I call the machine one thing, and the fixtures another.

Int. 7. In what respects would it be necessary to alter the fixtures, to do four or eight sided work?

Ans. I should put the work on to centres, and apply an index to it. I should leave off the clamps I now have.

Int. 8. Would this, in your judgment, be any change in the principle of the machine itself?

Ans. Of course it wouldn't alter the machine, as I explained before. It would not alter the principle, in my opinion.

Cross-examination:

Cross-int. 1. Please describe fully how the gun-stocks are held upon the two carriages in that machine.

Ans. On the sides, when we profile the sides, they are fitted on to a barrel; we bring up a clamp, which swings on a hinge up against the butt of the stock, which holds the stock with the lower side up. Then there is a cam which works on a straight piece, from six to twelve inches long, and presses the straight piece against the stock, longitudinally, and clamps the stock on to the barrel in the carriage. Then the two sides are planed, as in Exhibit No. 2. The stock is then removed to another slider or carriage, and put on to the barrel, lying horizontally, with the side up; we then clamp it on to the barrel, with a movable clamp near the lock, and fasten it to the barrel by a permanent clamp at the lower band; then it is clamped again at the butt, and the movable clamp removed, and the upper and lower sides of the stock are then planed, as also shown in Exhibit No. 2. The stock marked Exhibit No. 3 is planed on one carriage, the whole length of the stock, on one side, and as far as the hammer on the other side, and this is clamped to the carriage by three clamps, consisting of uprights, which bear a bracket, and thumb-screw. The sides of this exhibit, are planed upon the Daniels planer, before it is put into the carriage. The clamping is such as to prevent the planing of more than one quarter of the upper side of the stock. This difficulty could be avoided by making the clamps differently, but we have no necessity for it.

249 Cross-int. 2. How are these stocks finished, after leaving the profile machine?

Ans. We cut in the lock, and guard, and put on the bands, and

then it goes to the second turner, and is turned, and is finished by hand.

JAMES STILLMAN,
Foreman Stocking Shop.

SPRINGFIELD, *January* 28, 1865.

It is hereby agreed that E. S. Allen, of Springfield, will testify in accordance with the deposition of James Stillman, as above written.

BROWNE & MAYNADIER,
Solicitors for Complainants.
EDW. B. GILLETT, *for Defendants.*

Deposition of William Stimpson.

JANUARY 28, 1865.

Int. 1. Have you before testified in this case?

Ans. I have.

Int. 2. You formerly resided in Dana. Do you remember the time when Charles N. Stimpson, Oaks, and Fales left Dana for Westfield, to make their first negotiations for the purchase of the Westfield property?

Ans. I do.

Int. 3. About how many days were they absent from Dana, and about what time in the week did they return?

Ans. I couldn't tell how many days—two or three, I should say. And I couldn't tell about the time they came back, certainly, but I should say, the last part of the week.

Int. 4. Do you recollect whether Charles went to the cattle show at Athol, the next day, or Saturday of the same week, after he returned?

Ans. I do not know whether it was the next day, but I know he went on Saturday of the same week.

Int. 5. Do you know where Charles N. Stimpson was the Monday following? and please state your means of knowledge.

Ans. I do know. There were a couple of young ladies at his house. They belonged to New Salem. He goes to the livery
250 stable and takes a pair of horses, and takes in the two ladies, and his wife. They said they were going to his wife's brother's in New Salem. He returned the next day, with the team, before noon.

Int. 6. Did you have any conversation with him and Johnson together after his return? If so, when and where, and what was it?

(Objected to.)

Ans. After I saw him return, he went over to the stable to take his horses back, and as he was returning from the stable, I saw Mr. Johnson come from the store, and motion to him to stop. They both went and leaned up against the store. I saw them from my window, and I took my hat and walked right to them. I said to Charles, I have just learned what you are up to, and I should advise you to keep out of it. I understand you are forming a company to go into busi-

ness at Dana and Westfield, and I had rather you would give up all your property to them now than to go in with them, and be three or four years losing it. I said more to Charles, to the same effect. Johnson appeared to be a good deal excited while I was talking to Charles. Charles started off, and said, I am going to have some dinner. Mr. Johnson says, There, you have been the means of breaking up this whole concern, the forming of this company.

Int. 7. What day of the week was this?

Ans. Tuesday.

Int. 8. Do you remember about the lawsuit in New York, between Stimpson & Doane and others, and Alanson E. Brooks, on the Hale & Goodman patent?

Ans. I do.

Int. 9. Was the Gardner chair-leg machine introduced as evidence at that trial?

Ans. It was not.

Int. 10. How confident are you that it was not introduced, and have you any special reasons for remembering that it was not?

Ans. The machine was described to the plaintiff's counsel in the case, George Gifford. He says, we must keep watch of it, and keep it out of sight, if possible.

WM. STIMPSON.

251 *Deposition of O. W. Bayley.*

FEBRUARY 4, 1862.

Int. 1. What is your name, age, residence, and occupation?

Ans. Oliver W. Bayley; am fifty-two years of age; I reside in Boston, and am a machinist.

Int. 2. State how long you have been a machinist, and whether you were ever a superintendent of any large machine works?

Ans. I commenced in 1828, and have been in the business since. I was agent of the Amoskeag machine shop, at Manchester, N. H., for ten years, and have since been manager of other machine works.

Int. 3. Will you state whether, prior to 1844, and how long before, you were acquainted with machines of different kinds, in which the work to be operated upon, either of wood or iron, was held upon a carriage, and moved up to a cutting tool of any kind, such as a saw, either straight or circular, a drill or a borer, or a rotary planer? If so, please state what kind of machines they were.

(Objected to.)

Ans. The first one I ever saw was a clapboard machine. The index revolved around the centre the same as any other machine, where you use an index or a centre. Somewhere about 1820 to 1822 I saw this, I should think. There were other machines, such as fluting machines, planing machines, slabbing machines, saw-mills, gear-cutting machines.

Int. 4. Will you state what means were commonly used by mechanics for fastening work of different kinds upon the carriages of

such machines, and whether the use of one means or the other for fastening depends upon the character of the work to be done?

(Objected to.)

Ans. That would depend entirely upon the form of the material to be worked. In some cases we used keys, in some cases screws, sometimes clamps and dogs. There is an infinite number of modes of holding work. The index and centres is also used.

Int. 5. Will you look at the manner in which the work is held in the model marked "Hayward, E. Merwin, U. S. C.," and in the model marked "Hale & Goodman, Exhibit 1, N. Austin Parks," and say whether the methods of holding the work there shown were or were not well known to mechanics, in machines of the kind referred to in the previous answer.

(Objected to.)

252 Ans. Yes, every mechanic. I believe it is a universal method of holding work. They are both common methods and both the same thing; each of them held by a screw.

Int. 6. Will you state on what machines the method shown on the model marked Hale and Goodman was used prior to 1844, and in this? I refer not merely to the mere fastening of the work by a screw, but to the index and centres.

(Objected to.)

Ans. On the clapboard machine, the fluting machine, the slabbing machine, and the planing machine.

Int. 7. Will you state whether, on any of these machines, both of the methods shown in the models referred to were used at different times in the same machine, according to the nature of the work to be done? and if so, upon what machines? I refer not merely to the screw and dog, as shown in the Hayward model, but to the index and centres, as shown in the Hale & Goodman machine.

(Objected to.)

Ans. Both methods, the screw and dog and the index and centres, were used on both planers and slabbers; one had to be used on one kind of work, and the other on another. This has always been so since I can remember, and is so now. I can show the machines at my shop.

Int. 8. Will you look at the racks and pinions on the Hale & Goodman machine, and state whether both the racks and the pinions might be cut on one machine? and if so, whether a different mode of holding would be required in cutting the rack from that required in cutting the pinion, and what such modes would naturally be?

Ans. The pinions have been universally cut by one method, that is, on the shaft of the index-plate. There are various devices for cutting the racks, some use an index with a screw, others plane them out on a planer; but where they make a business of making those things, they have a machine designed expressly for it. Both might be cut on one machine, and then they would require a different mode of fastening.

Int. 9. Will you state the general character of the clapboard machine to which you first referred? how the clapboards were cut?

Ans. The round log was cut the length of the clapboard, and suspended on centres, as near as I can recollect, the same as in the Hale & Goodman model. The saw was circular, and was suspended underneath. The carriage moved longitudinally, as in the Hale & Goodman model, and with a rack and pinion, I think, but cannot say certainly. The saw went into the log to the depth of the clap-board, and at the side of the saw on the arbor were cutters which trimmed the edge of the clapboard. The index was the same as on the
253 Hale & Goodman model, but was moved automatically with each return of the carriage. The log was sawed in this way, clear around the whole of its circumference, and the clapboard was thinner on the inner edge than on the other.

Int. 10. State whether such a machine could be used for sawing boards of the same thickness on each edge, by cutting one side of a block in the same manner as is ordinarily done in saw-mills; and if so, what change would be necessary in the means for holding the block.

(Objected to.)

Ans. It could not, without an alteration in the machine itself, and in the mode of holding the work. The saw would be the same, and the carriage would have to be so constructed as to bring the log down as near to the centre of the saw as it could be operated, and the log would have to be fastened as in the common saw-mill.

Cross-examination waived.

O. W. BAYLEY.

Deposition of Moses G. Farmer.

MARCH 2, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. Moses G. Farmer; age, 45; residence, Salem; occupation, telegraphic engineer.

Int. 2. State whether you visited the shop of Mr. Rufus Powers, in Prescott, at any time last summer; and if so, who was present.

Ans. I did, in July last. Mr. Powers, Mr. L. Wheeler, and myself were present.

Int. 3. State whether you saw him do any work upon any machine in his shop; and if so, what the work was.

Ans. I saw him cut several blocks of eight sides and of curvilinear outline.

Int. 4. Will you look at exhibits marked "Powers 4" and "5," and state whether you recognize them, and when you saw them before?

Ans. I remember seeing him cut them on the 5th of July, '64, the time I visited his shop.

Int. 5. State whether or not he cut them upon a machine; and if so, what the appearance of the machine was, as to its being old or new, and complete?

Ans. He cut them on a machine, the most of which appeared to be old. The machine was sufficiently complete to do the work well.

Int. 6. Will you look at the model marked "Powers No. 2," and state how far that represents the machine, if at all?

254 Ans. I should consider it a truthful representation of the machine, as it was when those two blocks were cut, excepting that at least one of the holes in the index part of the carriage was split off.

Int. 7. State whether or not the index was used in cutting the several sides corresponding to the holes which were in the index, and how the block was set and held for the sides corresponding to the missing holes in the index.

Ans. The index was used in cutting the several sides of the block, excepting the side where the missing hole occurred. It was then placed, in the best judgment of the operator, in the position which it would have occupied had the hole been there, and was retained in its position by the friction upon the dog, which held the block.

Int. 8. Will you state what parts of the machine were new, or appeared to be new?

Ans. The ways marked *a* appeared to be new, and I think the pattern was new.

Int. 9. State whether or not you saw any pieces cut using a single pattern; and if so, where it was placed.

Ans. One or more pieces were cut with a single pattern placed in the front of the carriage, and underneath it. The front end of the carriage was raised and lowered by the irregularities of this pattern.

Cross-examination:

Cross-int. 1. Are you certain as to what number of holes had been broken off?

Ans. I do not feel quite certain, but am inclined to think only one, possibly two.

Cross-int. 2. Had the top part of the head-piece of the carriage been planed when you saw it?

Ans. I should think it was split off; it appeared like that. It didn't look as if it had been done intentionally, but accidentally.

Cross-int. 3. Was the top edge of this piece nearly parallel, or parallel, with the bottom edge of it?

Ans. I shouldn't think it was much inclined. I have a sort of vague impression that the diameter which joined the top and bottom hole was not quite a vertical diameter. The outline of the fracture was irregular.

Cross-int. 4. Did you see more than one such carriage?

Ans. I think I saw another carriage which had been used on this machine, as Mr. Powers stated, for another purpose, or on a machine like it. It was more like that in "Powers No. 1."

255 Cross-int. 5. Did you see another carrige with index holes in the head-piece?

Ans. I do not recollect that I did.

Cross-int. 6. What produced the marks upon the ends of the pieces "Powers 4" and "5?" I do not refer to the marks of the dogs, but the marks around them.

Ans. I don't recollect why those should have been there.

Cross-int. 7. Do you feel confident that the top part of the head-piece of the carriage had not been planed off when you saw it?

Ans. I don't feel confident, but my recollection is that where it was broken off there was a rough, irregular outline. I don't recollect any appearance of planing.

Cross-int 8. Do you recollect of what kind of wood the head-piece of the carriage was made?

Ans. I do not.

Cross-int. 9. Do you recollect whether there were not two pins in the head-piece of that carriage, near the two index holes, which would be joined by a horizontal diameter?

Ans. I don't recollect any.

Cross-int. 10. Was there a pin in the winch (which turned the centres) which entered the index holes?

Ans. I should think there was.

Cross-int. 11. Was there another hole thro' the winch-handle near that pin, if there was one?

Ans. I can't remember any but the one in which the handle was inserted.

Cross-int. 12. How were the patterns secured to the carriage?

Ans. I should think by screws thro' the patterns.

MOSES G. FARMER.

Deposition of William C. Hibbard.

FEBRUARY 24, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. William C. Hibbard; age, 50; residence, West Roxbury; occupation, mechanical engineer.

Int. 2 State whether or not you have been accustomed to testify as an expert in the courts of the United States in respect to mechanical questions arising under the patent laws; and if so, for how long a time.

256 Ans. I have been accustomed to testify as an expert in mechanics in the courts, and have been so for some sixteen or seventeen years.

Int. 3. Have you made the science of mechanics a study, especially with reference to the identity or difference of mechanical devices or machines?

Ans. I have, to a considerable extent.

Int. 4. Have you examined the specifications and drawings of a reissued patent numbered 1400, granted to Warren Hale, Allen Goodman, Lorenzo Hale, and John W. Goodman, dated February 10, 1863? And if so, state whether you understand the machine therein described and its mode of operation.

Ans. I have examined the reissued patent inquired of, and believe that I fully understand the construction and operation of the machine therein described.

Int. 5. Will you look at the model marked "Hale & Goodman, Exhibit 1, N. Austin Parks, examiner," and state whether it is

constructed in accordance with the specifications in the patent referred to?

Ans. I think it is, substantially. I see no material difference between the two

Int. 6. Will you look at the models, specified as follows, and state how far in your judgment they substantially agree withor differ from the machine described in the specification of the patent above referred to: First, the model marked "Hayward, E. Merwin, U. S. C." Second, the model marked "Exhibit Springfield No. 1, H. F. S., examiner." Third, the models marked "Wheeler No. 1, 1840, H. F. S., com'r. A. and B." and "Wheeler No. 3, H. F. S., com'r," A and B. Fourth, the model marked "Wheeler No. 5, H. F., com'r." Fifth, the models marked "Powers No. 2, H. F. S., com'r," and "Powers No. 1, H. F. S., com'r." Sixth, the model marked "Stimpson, H. L. H., U. S. com'r." Seventh, the model marked "Stimpson, No. 2, H. F. S." In connexion with the examination of the exhibit marked "Springfield No. 1, H. F. S., examiner," will you refer to the deposition of James Stillman for a description of the methods of fastening employed in that machine? In connexion with the examination of the model marked "Hayward, E. Merwin, U. S. C.," will you refer to the deposition of Levi Hayward? In respect to the several models marked "Wheeler and Powers," will you refer to the depositions of Lyman Wheeler and Rufus Powers for an explanation of their construction and mode of operation?

Ans. Before comparing the machines, I will say that in the examination of the models of the Hayward, Springfield, Wheeler, and Powers models, I have read the testimony of Hayward, Stillman, Wheeler, Powers, and Dexter explaining the operations of the machines which the models purport to represent, and think that I understand fully how the machines operated. In comparing all
257 the machines enumerated in the interrogatory, I am of the opinion that they all embrace the same general mode of operation, that is, in all the result to be produced is to cut to a longitudinal form a piece of wood, or other material, to correspond to the shape of a pattern which is placed in the machine; and the essential parts of each machine consist, in the first place, of a carriage to which the piece to be wrought is fastened, which has a longitudinal movement sufficient to carry the piece endwise its entire length, or so much of its length as is intended to be operated upon; to which carriage a pattern or patterns are attached, substantially parallel with the surface of the piece to be produced; and, secondly, of a rotating cutter for removing the surplus material, which has a movement toward and from the carriage, which movement is controlled by the surface of the pattern. Instead of this movement of the cutter to and from the block, the cutter is, in some of the machines enumerated, made stationary, and a corresponding movement is imparted to the carriage. The operation in either case, however, is precisely the same, the essential thing to be done being to cause the block and cutter to approach and recede from each other under the control of the pattern. The ma-

chines are severally somewhat different in the details of construction, and show in different forms how the same principle and mode of operation may be embodied to produce the same form, and also how they may be embodied to produce different special forms; as, for instance, in the Hayward machine, the form which it was most particularly adapted to produce was that of chair legs, and it is, in the detail of construction of its several parts, very similar to the machine described in the patent, in the manner of applying the patterns, and in the construction of the frame in which the cutter operates, and in the means by which the vertical movements of the cutter-frame are assisted in passing over the patterns. The purpose for which the machine described in the patent was apparently designed was to make piano and melodeon legs, and such objects, but they could obviously be made upon the Hayward machine, just as well as chair legs, by changing the form of the pattern upon the carriage, and putting on suitable means for fastening the block to it. I speak of the Hayward machine as a single machine, although the model represents two machines for making different sides of a chair leg. As regards the Springfield machine, I find the same general mode of operation and the same essential parts; that is, a carriage to hold the material to be cut to shape with a pattern attached to it, and a cutter for removing the surplus material; the cutter and block in their movements to and from each other during their longitudinal movement, being controlled by the form of the pattern. The form of the machine differs considerably from the other, to adapt it to the different form of object, viz., a gun-stock, which it is designed to produce, and the different forms of fastenings for connecting the material to the carriage are
258 such as adapt it more especially to its particular use. In comparing the Wheeler models, Nos. 1 and 3, I have considered the cylindrical pieces of wood, with the cutters attached to them, as mounted in a lathe, so as to make them revolving cutters, and that the cylindrical portions of the pieces on either side of the cutters are guiding surfaces, which work in connexion with the patterns which are upon either side of the carriage. As the objects which are said to have been made by them were handles, which are small, the carriage is described as held in the hand and applied to the upper surface of the revolving cutter stock, and carried from end to end, with the material, over the cutter. In this machine, as the objects designed to be made were of polygonal form in cross-section, the pieces were fastened in the carriage in precisely the same way as in the machine described in the patent; that is, by being attached to centres, to one of which an index is attached to determine the number of sides to be given to a piece, and hold it in a fixed position while operated upon by the cutter.

In the machine represented by model Wheeler No. 5, the carriage which holds the block is represented as mounted upon a table, which moves on ways to guide it longitudinally, and the carriage with its block passes under the cutter, and the patterns are pressed upwards against the guiding surfaces on either of the cutters by means of a spring. These machines of Wheeler would either of them form a

piano leg, by precisely the same mode of operation as is exhibited in the machine described in the patent, without addition or any other change than simply a change of the pattern.

In the Powers machine No. 2 there are also the same essential parts as in the machine in the patent, viz., the carriage with provisions for holding the block and patterns attached to it; also the revolving cutter for cutting away the *the* surplus material, and guiding surfaces coincident with it, which work in connexion with the patterns upon the carriage. This machine was also intended to make forms of a polygonal cross-section, and therefore the means provided in the carriage for holding the block are a pair of centres, with an index attached to one of them.

In the Powers machine No. 1 there is a rude representation of a machine for making spokes, which also has the two essential parts that I have before named, viz., the carriage with its patterns and cutter, with a tracing surface which acts in connexion with the pattern; and it also has an addition, a means for changing the form of the piece transversely, by continually changing the position of the pattern or model which is placed in the machine, which, being connected with the block and suspended upon the same axis with it, rotates with it, and presents in succession the several sides of the model to the tracing or guiding surface; thus giving to the different sides of the block a different form corresponding to the different sides
259 of the model. It is, in effect, a machine for cutting irregular forms, and goes beyond the provisions of either of the other machines. The machine marked "Stimpson, H. L. H.," has also the two essential parts before mentioned, viz., the carriage with its patterns and longitudinal movement, and cutter with tracing or guiding surfaces working in connexion with the patterns; but in this machine the patterns working in connexion with the carriage which carries the *the* block, has a peculiarity in construction which is not to be found in the other machines, and that consists in elongating the pattern and placing it upon a separate carriage, which has a much greater extent of movement than is given to the carriage which carries the block; which is done for the purpose of enabling the tracers or guiding surfaces of the cutter to pass over abrupt curvatures of the pattern with greater facility. The purpose of this machine is also to make pianoforte legs and objects of a polygonal cross-section, and the block is therefore held upon centres, one of which is provided with an index.

In the machine Stimpson No. 2, which is arranged to make objects of polygonal cross-section, there is the same general mode of operation, and the same essential parts, which being constructed with the axes of the cutter standing vertical, perpendicular to the surface of a table upon which the carriage rests and is moved, many of the minor details of mechanism found in the other machines are omitted, the carriage having but one pattern, and being moved to and from the cutter, and longitudinally, from one end of the block to the other, by the direct application of the hand of the operator to it, without the intervention of other mechanism.

If we compare the subordinate parts of these machines with each other, with reference to the peculiar construction of those parts, and limiting the comparison to those parts alone, we shall find considerable diversity in the construction of them; as, for instance, in comparing the manner in which the pattern co-operates with the cutting cylinder in the Hale & Goodman machine with the manner in which the same parts co-operate in the model marked "Stimpson, H. L. H.," or the Oaks machine, as it has been called, we find there is a marked difference, although the ultimate result to be accomplished by them is the same—that is, they are mechanical equivalents of each other, in the organization of the machine; the ability to work over the abrupt curvatures of the pattern in the Oaks machine being obtained by elongating the pattern, and thus diminishing the angles of the surface of the pattern with the line of movement of the carriage, which enables the tracing surfaces to move over them more easily; while in the Hale & Goodman machine, the cutter and its tracing surface are assisted over the curvatures of the pattern by the hand of the operator, working a suitable gearing that raises and lowers the cutter-frame. This assistance in raising and lowering the cutter-frame in the Hay-
260 ward machine, is applied by the means of the treadle, marked C; in this machine the piece is fastened to the carriage by means of centres, or dogs, at each end of the block, but the index which is used in the Hale & Goodman machine is not employed, because the object to be cut does not require and would not permit its use, as but one side only of the block is to be formed to the shape of the pattern. But as a means for fastening the block to the carriage, which is adapted to the kind of piece to be made, I regard it as the equivalent of the mode represented in the Hale & Goodman model—that is, that each performs, in its respective machine, precisely the same function of fastening the block to the carriage, and each is best adapted to the special object to be made by each machine. If we compare these two modes of fastening the block with each other simply, without reference to the general mode of operation of the machine, they would be substantially different, but when applied to the machine, in which their common purpose is simply to hold the block to the carriage and present it to the cutter, they were both well known means in the arts, for holding objects to be operated upon, in machines for cutting them to form, and were interchangeably used, according to the nature of the work to be executed.

I do not think that this difference in the manner of holding the block, nor the difference in operating or in using the patterns, found in the Hale & Goodman, and the Oaks machines, make them substantially different, as machines for producing irregular surfaces.

In the Springfield machine there is still another way of holding the block, which is specially adapted to its especial purpose, but in doing its work the machine operates substantially in the same manner as in the other machines, as I have before described. In the other models the method of holding the block by means of centres and an index, is identical with that found in the Hale & Goodman machine.

Int. 7. You speak of the two modes of holding the block upon the

carriage shown in the Haywood model, and in the machine described in the patent, as being both well known models in the arts. Had you, prior to 1844, any personal knowledge of the use of these means, in machines of different kinds? If so, will you please state in what machines, and whether the devices have continued in common use to the present time, for the same purposes, and whether in any machine within your knowledge both devices or means of holding the work are used, being exchanged the one for the other, according to the character of the work to be done?

(Objected to.)

Ans. I had personal knowledge of the use of those respective modes of holding objects upon machines prior to that time, and I believe they were in common use in the shops, and within the general
261 knowledge of mechanics. The machines and manufactures, which I now recall to mind, in which both were used interchangeably, or as the occasion required, were in machines for making clap-boards, in which both methods of fastening were used, but in different machines, on slabbing machines, so called, for dressing off surfaces of metal, where the object was sometimes fastened upon the carriage directly, or held upon centres fastened to the carriage; also planing machines used in the shops for planing metals, in which both methods of fastening objects were used upon the same machine, and are extensively used for the same objects up to the present day. Other machines I also recollect, in which only one mode of fastening objects was used, viz., suspending them upon centres, which were more special in their use. Of this class were gear-cutting engines, fluting machines, machines for engraving pencil-cases to pattern, machines for cutting objects to polygonal cross-section, such as bedstead posts, where the moulding was formed by a cutter, with its axis parallel to the axis of the piece. This machine I also saw, I think, before the date inquired of.

Int. 8. In all of these machines to which you have referred, was there a carriage which carried the work to a cutting instrument of some kind?

(Objected to.)

Ans. There was.

Int. 9. Do you know whether there were, previous to 1844, or are now, other modes of fastening work to carriages of this kind—other than those shown in the models which you have been examining—I mean methods in common use among mechanics?

(Objected to.)

Ans. There were, and are, various methods of fastening objects upon carriages for the purpose of holding the object while it was presented to and acted upon by a cutting instrument, taking their character from the form of the object to be held and the nature of the operation to be performed upon it; such modes of fastening being regarded as the incidental fixtures of a machine, which would be modified whenever the work to be performed by the machine was changed.

Int. 10. Will you state whether or not some method of fastening work to carriages of this kind is essential to the completeness of the

carriage, so as to enable it to perform its proper functions in the machine where the carriage is used?

Ans. It is essential and necessary, because without some such means, the purpose for which the carriage is constructed, viz., to carry the block or material while it is acted upon by the cutter, cannot be accomplished.

Int. 11. In your answer to the seventh interrogatory, you have spoken of machines in which the two methods of holding shown
262 in the Hayward model and in the machine described in the patent which has been referred to, were used interchangeably, one method in some of the machines being used in one machine, and the other method in other machines of the same kind; and both methods being used in some of the other kinds of machines at different times in the same machine. Will you state whether, in your judgment, two machines of the same kind, in one of which one of these methods was used, and in the other, the other method, were, by reason of the different methods employed, substantially different machines; and further, when, in the same machine, a change was made from one kind of fastening to the other, whether a substantial change was made in the machine itself?

Ans. By the method of fastening found in the Hayward machine, I understand is meant simply the rigid fastening of the block to the carriage. With this understanding I answer that in my judgment these different methods of fastening inquired of do not change the general mode of operation and principle of the machine, but are merely incidents in the use of the machine which relate only to a subordinate part of the operation. The machine is adapted to make a great variety of forms, either one of which is equally legitimate to its mode of operation, and these different methods of fastening are but minor adaptations of the machine to a special use, or to make some special form of object. These changes do not change the nature and character of the machine, in my opinion, any more than changing the patterns in the machine, to produce the form desired.

Int. 12. In your answer to the sixth interrogatory, you speak of two essential parts of the machines referred to in that interrogatory. Will you refer to the reissued patent already mentioned, and also to the original patent granted in 1845, and state whether you find the same distinction made in those patents, and how they are there characterized?

Ans. I find both in the original patent and the reissue that the same distinctive characteristics of the machine are described, or, in other words, that the main features of the machinery are said to consist of the two essential parts named; those two parts embracing several subordinate devices which co-operate within these two essential parts, which together constitute the machine.

Int. 13. Will you state whether or not these two main features of the invention, as it is said in the reissued patent, constitute or embrace the whole of the mechanism of the machine?

Ans. They do.

Int. 14. Referring again to the Hayward model and to the machine

described in the reissued patent, or to the model which represents it, will you state whether or not the change from one mode of fastening to the other, or, in other words, the introduction of the index
263 or dial, in the place of the means for fastening shown in the Hayward model, made any substantial change in the mode of operation of the other parts of the machine; or whether the index or dial when introduced into the machine performed any different function, or operated in any manner substantially different from what it does in other machines in which it was used prior to 1844, and is now used, such as the machines which you have referred to in your answer to the seventh interrogatory?

(Objected to.)

Ans The change in the mode of fastening inquired of does not in the least affect the mode of operation of the machines. The machine described in the patent would make precisely the same form of surface upon the block, if it were fastened permanently to the carriage, that it now does. The mounting of the block upon centres does not in the least affect the mode of operation of forming the surface, but is a more convenient way of changing the position of the block in order to reproduce that form of surface upon another part of it. The machine would produce precisely the same form of leg by changing the position of the block upon the carriage of the Hayward machine, to present its several sides to the action of the cutter. The mounting of the block upon centres upon the carriage is only a more convenient mode of fastening to enable the block to be changed in position, without entirely unfastening it.

The use or not of the index, in this machine, I regard as identical with its use or omission in the other machines referred to in the interrogatory.

Int. 15. Will you state further, whether, in your judgment, the introduction of the index into the Hayward machine was attended with any substantial difficulty, such as required anything substantially different to be done by the constructor from what was commonly done in machines in which the index was used prior to 1844, when two of those machines were to be provided with the two different modes of fastening shown in the Hayward machine, and in the machine described in the reissued patent, or when in the same machine a change was to be made from one of these means of fastening to the other?

Ans. The change of the means of fastening suggested in the interrogatory, if applied to the Hayward machine, would, in my judgment, be precisely the same as making such a change upon the slabbing or planing machine, which I have mentioned as having been done prior to 1844.

Int. 16. If I understand your answer, you mean that this change would require nothing substantially different to be done from what, prior to that time or since, was frequently done by mechanics upon other machines, when a change was to be made from one mode of fastening to the other. Do I understand you correctly?

(Objected to.

Ans. I think you do. I mean to say that both these modes of

264 fastening were well known in the arts, and were, I think, within the general knowledge of skilful machinists.

Int. 17. Will you compare the Hayward and Springfield machines, the machines described in the reissued patent, and the machine represented by the model marked Stimpson, "H. L. H., U. S. com'r," as to the means of moving the cutter to and from the carriage, and explain how the difference between them in this respect compares with the difference in the method of holding and turning the work, as affecting the character of the machines themselves?

Ans. The manner in which the pattern co-operates with the cutter in the Hale & Goodman, Hayward, and Springfield machines is the same. The difference between this mode of applying the pattern and the mode shown in the model "Stimpson, H. L. H.," constitutes a much greater difference in the construction of the machine, in my opinion, than the difference inquired of in the modes of fastening, and is further distinguished from the other as being new in itself, so far as I know—that peculiarity in its construction not being found in any other machine.

Int. 18. Will you state which of these two things, viz., the modes of fastening and the modes of moving the cutter to and from the carriage, are most intimately related to that feature or characteristic of these machines, taken as a whole, which distinguishes them from other machines in which a carriage is employed to act in conjucnction with a cutting instrument?

Ans. I regard the means for moving the cutter to and from the carriage as more intimately related to that which distinguishes these machines from the others inquired of.

Int. 19. Will you state why you so regard them?

Ans. Because the giving to the cutter a motion toward and from the carriage, or conversely of the carriage toward and from the cutter, while it is moving lengthwise, which movement is controlled by a pattern attached to the carriage, is the property which particularly distinguishes this machine from the others inquired of, and is what appears to me to constitute its only novelty as compared with the machines previously existing, and the modification of this part of the machine found in the model "Stimpson, H. L. H." I therefore regard it as more substantial than the other modifications named, in the mode of fastening, which modifications were well known and in common use.

Int. 20. In your answer to the sixth interrogatory you speak of the means employed in the model marked "Stimpson, H. L. H.," for raising and falling the cutter as the equivalent for the means shown in the reissued patent for doing the same thing in the machine there described. Will you state whether in 1854 or 1855 the means shown in the model first referred to were, within your knowledge, well known substitutes among mechanics for the means described in the
265 reissued patent for effecting the same object, or whether the same thing was true in 1844 or 1845?

Ans. They were not. The manner of constructing this part of the

machine shown in the model Stimpson, H. L. H., I have never seen or known to be employed in any other machine at any time.

Int. 21. Looking at the two machines last referred to, not with reference to their general object or purpose as machines for planing objects of irregular form longitudinally, but with respect to the special means which are employed in the machines for effecting that purpose, or the special combination of parts for effecting that purpose—that is, looking at the two machines as special machines under one general class—do you regard them as substantially alike or unlike ?

Ans. If we compare the two machines with reference to the especial manner in which the carriage, pattern, and guiding surface of the cutter co-operate, leaving out of the comparison the rest of the machine, then there would be a substantial difference in the construction of those parts in the two machines—that is, that there is such a difference in the immediate co-operation of those parts in the Stimpson machine from what is found in the Hale & Goodman machine that the one would be a patentable improvement upon the other.

Int. 22. Will you look at the models marked Wheeler Nos. 1 and 3, and state how the fact that in using those machines when there was no provision made for maintaining mechanically the carriage at right angles with the cutting cylinder, affects their substantial identity with or difference from the machine marked Wheeler No. 5, and the machine described in the reissued patent?

Ans. It does not affect the identity of the mode of operation, but the employment of slides or other means for guiding the carriage mechanically is a more complete mechanical embodiment of the mode of operation.

Int. 23. State whether or not the same condition of the parts is to be maintained in the two cases—that is, when there is provision for maintaining the carriage at right angles to the cutting cylinder mechanically, and when there is not.

Ans. It is. When a light carriage and block is to be used, the guidance can be done effectually by the hand. but when a larger and heavier block is to be operated upon, the strength of the hand is not sufficient, and mechanical means for guiding and moving the carriage becomes necessary.

Int. 24. If I understand the Hayward machine correctly, it contained a provision for moving the carriage in one direction without the aid of the operator. In the Springfield machine the carriage, if I understand it, was moved directly by the operator, and so also in the machines represented by the models marked Wheeler Nos.
266 1 and 3; while in the machine represented by the model marked Wheeler No. 5, and the machine described in the reissued patent, the carriage was moved by the operator by means of a crank and a rack and pinion or intermediate gearing. Will you state whether I am correct in my understanding of these machines, and if so, how these differences affect the substantial identity of the several machines, and whether in your judgment any more importance, as affecting, the substantial identity of the machines, should be attached to the fact that in some of the machines the carriage was kept at right angles

with the cutting cylinder by the operator directly, without the aid of mechanical provision for that purpose, than to the fact that in some of the machines the movement of the carriage was effected by the operator without the aid of mechanical means; while in the others mechanical means were provided for effecting this purpose?

Ans. The description of the construction and operation of the machines mentioned in the interrogatory is as I understand them to be. These differences of construction do not in my opinion affect the substantial identity of the machine, but are modifications which are to be used or not, according to the nature of the different objects to be produced by the machine. In the Wheeler machines Nos. 1 and 3, where the carriage and blocks are light and can be easily handled, and having also a pattern upon either side of the block, the rectangular position and movement of the carriage to the cutter can be maintained without difficulty. I do not consider that more importance should be attached to one class of differences named than to the other.

Int. 25. Will you look at the several parts of the machine marked Wheeler No. 4, and also at the description given of them in the deposition of F. M. Peckham, and of the method of using them, and state how far they agree with or differ from, substantially, the machines represented by the models marked Wheeler Nos. 1 and 3 and 5?

Ans. It is precisely the same mode of operation, the structure of the machine being more nearly like the model marked Wheeler No. 5, when all the parts were used together. The different modes in which it was used, as described in the deposition of Peckham, are but additional illustrations of the different modes in which the same principle may be embodied. When the part marked A, with the handles upon it, was used without the other parts, as described by Peckham, it was precisely like the use of the models marked Wheeler 1 and 3 in making handles.

Int. 26. Will you look at the certified copy of the letters patent granted to Allen Goodman, numbered 5927, and dated Nov. 21, 1848, and state whether you find in the machine therein described,
267 substantially the same machine as that described in the reissued patent before referred to, including the use of the index in substantially the same way?

Ans. I find a machine which embodies the mode of operation found in the machine of Hale & Goodman somewhat modified, and with other mechanisms combined with it to perform additional functions; this machine also has the block mounted upon centres with an index.

Int. 27. Will you look at a certified copy of a patent granted to Rufus Powers, May 8, 1849, and numbered 6436, and compare the machine therein described with the machines represented by the models marked Powers No. 1 and No. 2, and state whether the machines represented by the models, or their principles and modes of operation, are embodied in the machine described in the patent?

Ans. The same principle and mode of operation represented with the models are to be found in the patent, which is more nearly in structure like the model Powers No. 1; but the machine represented

in the patent is much more elaborately constructed, and the details of mechanism for carrying out the several operations are much more fully provided for, and many provisions are represented in the patented machine which have no representation in the models.

MONDAY, *February 27th.*

Int. 28. Will you refer to the model marked "Wheeler No. 2," and to the description of the machine which it is intended to represent, contained in the answer to the twenty-second interrogatory of Lyman Wheeler's deposition, and state whether you understand the construction and operation of the machine described; and if so, how far, in your judgment, it is substantially alike or unlike the machine described in the reissue patent hereinbefore referred to?

Ans. I have examined the model and read the description mentioned in the interrogatory; when the machine was used for rounding the outside of the hubs longitudinally, in the manner described in the deposition, its mode of operation was analogous to the mode of operation of the machine described in the patent; although the capacity of the machine was limited to the particular use for which it was intended.

Int. 29. Do you find in that machine the index? and if so, will you state what its office is in that machine, as compared with the office of the index as described in the reissue patent?

Ans. I do find the index there, and its office is precisely the same as in the reissued patent.

Int. 30. Will you explain how far the fact that in that machine a saw was used for forming the side of the hub longitudinally,
268 instead of a rotary cutter, as described in the reissue patent, affects the analogous character of the two machines, so far as the use of the index is concerned?

(Objected to.)

Ans. It does not affect it at all so far as the use of the index is concerned; the purpose of the index in this case is to present the different sides of the block or object held by it to the action of the cutting instrument, when it is desired to have those sides at an equal distance from a common axis, and that is, I think, generally true in all machines in which the index is used to control the position of the piece to which it is attached.

Int. 31. In answer to a previous interrogatory you referred to a number of machines in which the index was commonly used. Will you state whether those machines were designed to operate upon wood or iron, or both, and how far the duty or function of the index in those machines, or in any machines in which the index was used within your knowledge, is affected by the material to be operated upon, or by the particular kind of cutting tool employed, or by the particular cutting operation to be performed in any given case?

Ans. Some of those machines were designed to operate upon wood and some upon metals, and some upon both; the duty or function of the index in those machines is not affected by the conditions inquired of, except that the index must in some way be efficiently

connected with the object to be operated upon, and should have sufficient strength to sustain the object under the action of the cutting instrument.

Int. 32. What is the circumstance or condition which, in respect to any kind of work to be done upon any machine, makes the use of the index expedient or necessary?

(Objected to.)

Ans. It is when a succession of operations is to be performed upon a piece at a common distance from an axis.

Int. 33. Have you read the description given in the depositions of Lorenzo Hale and Allen Goodman of the first leg machine constructed by Mr's Warren Hale and Allen Goodman, at North Dana? If so, will you state whether you understand its construction and operation, and give your judgment as to its being substantially like or unlike the machine represented by the model marked "Hayward, E. Merwin, U. S. C.," and also the machine described in the reissue patent heretofore referred to?

Ans. I have read the description inquired of, and think that I understand it. So far as it described the machine constructed at North Dana, I think it was in function and mode of operation precisely like the Hayward machine, and also substantially like the machine described in the reissue patent: it was more particularly like the Hayward machine rather than the other, in that, as I understand
269 the description, no index was used to regulate the turning or placing of the block in it.

Cross-examination:

Cross-int. 1. In your sixth answer you say that in all the machines there enumerated, the result to be produced is to cut to a longitudinal form a piece of wood or other material to correspond to a pattern. Is there not in the Hale and Goodman model, and in the models "Stimpson No. 2" and "H. L. H.," this further result to be produced, viz: to cut a succession of longitudinal forms on the same block, at an equal distance from an axis?

Ans. There is this result to be produced, which is to cut, longitudinally, a succession of the same forms upon the block, which is not to be found in the Hayward machine. (counsel for complainants request the expert to confine himself to the examination of the machines mentioned to the interrogatory.) nor in the Springfield machine, but is to be found in the other machines enumerated in the 6th interrogatory, to which reference is made.

Cross-int. 2. This further result is not to be found, as I understand you, in the Springfield and Hayward models?

Ans. It is not, although instead of a "further result," (counsel for complainants requests the expert to confine himself strictly to the answer called for by the question,) I think it should be called a modified result, as I regard the one as a substitute for the other, adapted to the requirements of the work to be done.

Cross-int. 3. The function of the centres and index in the models "Hale & Goodman," "Stimpson, H. L. H.," and "Stimpson No.

2," is to hold the block and allow it to be turned a certain distance, and then to hold it again in that position, is it not?

Ans. It is.

Cross-int. 4. In your sixth answer you speak of the centres or dogs in the Hayward machine. Have those centres or dogs this function? I mean the whole of it, and do not ask whether they have any part of it, or what part of it.

Ans. They have not.

Cross-int. 5. The difference between the "centres or dogs," in the Hayward machine, and the index and centres in the three models before named, enables those three models to produce work which can't be produced upon the Hayward machines without alteration, does it not? I do not ask as to what these alterations should be.

270 Ans. I do not so consider it; I think the same work can be produced upon the Hayward machine without any substantial alteration, that is, any alteration which affects the nature and character of the machine, as a machine; there would have to be an alteration of the pattern, and then a machine with that form of fastening, would make a pianoforte leg without the use of the index; the index and centres employed in the three machines named is only a more convenient device for holding the leg and changing its position than that shown in the Hayward for making objects having a polygonal cross-section; for the making of chair legs, for which the Hayward machine was designed, where only one side of the piece was to be acted upon, the mode of fastening there shown would be the best.

Cross-int. 6. In the Hayward machine the block rests upon the carriage throughout its whole length, does it not? and is supported against the action of the cutting tool, mainly, in that way, the purpose of the dogs being to keep it in this position?

Ans. Judging from the model, it was probably intended that the chair leg should be supported upon the bed more or less perfectly against the lateral pressure of the cutters, which was necessary, because (counsel for the complainant desires to remind the expert that the question does not call for his opinion as to the reasons for so supporting the piece) the leg was of considerable length and of small transverse dimensions, and therefore had not sufficient rigidity to sustain the action of the cutter; the purpose of the dogs is to prevent it from moving endwise, and also laterally, in connexion with the form of the bed.

Cross-int. 7. You have said, if I understand you, that merely changing the pattern would enable the Hayward machine to be used for making pianoforte legs. Please describe fully how you would make a pianoforte leg upon that machine, without any other change that the one spoken of.

Ans. The first way that occurs to me would be this—first, to prepare the blocks by sawing them out with a gig-saw to a form as near as practicable to the finished form to be produced; then to lay them upon a bed of a proper height at each end of the block between the dogs, and fasten it in the same manner as the chair leg is fastened.

I think I should plane half of the sides of the polygon by one end of the machine, with the beds of a proper height to take the rough side of the blocks, and the beds at the other end of the machine of a proper height to take the finished sides of the block, or the sides that had already been acted upon by the cutter. Another way would be, to leave a piece upon each end of the leg, by which to dog it and to rest upon the bed, which piece would be removed after the leg was finished; in which case, the entire operation would be
271 performed upon one end of the machine. In various ways the block could be fastened to the carriage and adjusted to the cutter, of this general character.

Cross-int. 8. Are you practically acquainted with the manufacture of pianoforte legs?

Ans. Not as a business.

Cross-int. 9. Are you practically acquainted with it in any other way?

Ans. I think I am. I am practically acquainted and have for many years been practically engaged in the construction and operation of wood-cutting machinery of analogous character to that under examination.

Cross-int. 10. Suppose the second face of the block to be planed as described in the first part of the seventh cross-answer should vary from the first face so that at the foot end this face was one-sixteenth of an inch nearer the axis of the completed leg than the first face, and at the top one-sixteenth of an inch further off—by the first face I mean the face first put upon the bed, and by the second face I mean the face secondly put upon the bed—what would be the effect upon the planed faces?

Ans. The effect would be that they would be unequal in breadth. They would form the sides in cross-section of an irregular polygon.

Cross-int. 11. It is generally true, is it not, that in making piano legs in the way just referred to, the irregularities in the rough block will be found more or less in the completed leg?

Ans. I do not see that they will. I do not see that this has anything to do with the formation of the shape of the leg.

Cross-int. 12. Then the rough block would not be in contact throughout its length with the bed as the piece in the Hayward model is, but would require to be trued in some way?

Ans. I believe I described the block as resting upon the bed at its ends only, the block being of sufficiently large diameter to be rigid under the action of the cutters. The block was also considered as being cut to nearly the true form by the gig-saw, which could easily be done.

Cross-int. 13. Suppose the gig-saw left the faces of the rough block at different distances from the axis of the completed leg, so that the bearing points of the several faces on the bed were at different distances from the axis of the completed leg, what would be the effect of this as to the irregularity of the faces of the completed leg?

Ans. If those irregularities were not corrected in fastening the

block upon the carriage, they would also be found upon the completed leg.

Cross-int. 14. The result to be produced on the Hale & Goodman, Stimpson, H. L. H., and Stimpson No. 2 machines is to manu-
272 facture regular polygons, or so substantially regular that the same caul will fit all the sides of one leg, is it not?

Ans. It is to form legs which in cross-sections are regular polygons; but this has no effect upon the form of caul to be used, whether the cross-section is a regular polygon or not, as all the sides would be of the same form longitudinally, because they are made of the same pattern.

Cross-int. 15. In any method of making piano legs upon the Hayward machine without other change than you have before spoken of, the leg must be turned by the direct application of the hand of the operator to it after the screw is withdrawn, and must be refastened before the next face is cut, must it not? I refer to the Hayward machine alone.

Ans. It must.

Cross-int. 16. Have the clamps in the Springfield machine the whole of the function which the centres and index have in the Hale & Goodman, Stimpson, H. L. H., and Stimpson No. 2 models? I mean the function spoken of in the third cross-interrogatory and answer.

Ans. They have not.

Cross-int. 17. (De bene esse.) In your answer to the seventh direct interrogatory you have spoken of machines in which both the respective modes of holding objects there referred to were used interchangeably. Please state whether these machines had the two essential parts spoken of in the sixth direct answer; and if not, which of those parts each of them had.

Ans. All of those machines referred to, in which both methods of fastening were used, had two parts, viz: the carriage to carry the material and a cutter to operate upon it. In the planer the cutter was not rotary, and in neither of the machines was to be found a cutter having a lateral movement controlled by a pattern attached to the carriage, as they were designed to form (counsel for complainant desires to call the witness's attention to the fact that the question does not call for the design of these machines nor the reason why they were built as they were) surfaces longitudinally straight.

Cross-int. 18. (De bene esse.) Please answer the same question in regard to the other machines referred to in the same direct answer, the seventh.

Ans. The other machines had the two corresponding parts, viz., the carrige and the cutter. The clap-board machine did not have a lateral movement of the cutter controlled by a pattern attached to the carriage. In gear-cutting engines there was the carriage, index with the object attached to it, rotary cutter and sometimes a pattern, to change the position laterally of the work in relation to the cutter in cutting spiral gears. In machines for engraving pencil cases there is a carriage with a pattern and a cutter moving with a tracing sur-

face over the pattern, which controlled its lateral movement,
273 but the cutter did not rotate. In the machine for cutting bedstead posts to polygonal cross-section there was a carriage and cutter, but no pattern, as the form of the cutter gave the form longitudinally to the object. In all these last-mentioned machines the object to be operated upon was mounted upon an axis, and its rotary movement controlled by an index.

Cross-int. 19. (De bene esse.) Please describe more fully the patterns and cutters used in the gear-cutting engines and machines for engraving pencil cases.

Ans. The cutter of a gear-cutting engine is formed of a profile in a plane passing through its axis, of the shape of the space between the teeth of gears. All its cutting surface is provided with teeth somewhat like saw teeth. It is rotated and the material to be cut away is pressed up against it in a direction tangent to its periphery. When it is designed to cut spiral gears, the index, or some part connected directly with it, is made to work against a piece of metal which is bent to a spiral form, which is so placed that as the piece is moved up against the cutter, the index will be rotated by the action of the pattern, so as to cut helically across the surface of the gear bland, the axis of the cutter being also inclined to conform to the inclination of the teeth. In the machine for engraving pencil cases the tool was a graver, fixed in a carriage, and the pattern was a hardened steel round bar, with an ornamental figure engraved upon it in relief. A tracer point attached to the carriage passed over this pattern and raised and lowered the cutter as the point passed over the pattern. The pattern and mandril holding the case were geared so as to rotate together. The graver was then passed from end to end of the pencil, making a fine line throughout its length, excepting in the parts where the pattern and its tracer raised the cutter from the work. The case and the pattern were then rotated a small distance and another line engraved, and so on until the entire circumference of the case was engraved, which left the surface corresponding to the elevations of the pattern plain, in the form of a vine or wreath, or any other ornamental form desired.

Cross-int. 20. In the models "Wheeler No. 1 and No. 3" there are no mechanical means, are there, for preserving the axis of the work at right angles with the axis of the cutter? I speak of these models as you considered them in your direct examination.

Ans. In my direct examination I considered that the pieces marked B were mounted in a lathe, to make them revolving cutters, and I also had in mind the description of the same given in the deposition of Lyman Wheeler, in which the frames or carriages marked [A] were guided over such revolving cutters by the piece marked *a* in the model "Wheeler No. 5." I therefore think that although there was not so full a provision for guiding the carriage longitudinally past the
cutters as when slides are used to guide the carriage, that that
274 mode of guidance was sufficient to enable the parts to operate properly; and I also think that when the carriage and piece were small, with two patterns, one upon either side of the piece, that

the carriage could be guided practically over the cutter without difficulty by the hand, because the edge of the cutter being straight and the parts of the shaft being cylindrical, on either side of it, a little variation in the movement, to one side or the other, would produce no prejudicial result.

Cross-int. 21. Leaving out of consideration the piece marked *a* in Wheeler No. 5, and taking Mr. Wheeler's first description of the alterations of the machine represented by models Wheeler No. 1 and No. 3, please answer the same question.

Ans. In relation to those there is no mechanical means for keeping the carriage at right angles to the cutter, except the eye, and the indications furnished by the form of the patterns, the undulations of which indicate to the hand when the carriage is square upon the shaft of the cutter.

Cross-int. 22. In the models Wheeler No. 4, A and B, when used as described in the deposition of Peckham, excluding the part A when used alone, either with or without the handles, and in the models Hale & Goodman, Stimpson, H. L. H., and Stimpson No. 2, are there not mechanical means for preserving the axis of the work at right angles with the axis of the cutter?

Ans. There are.

Cross-int. 23. In the model marked Powers No. 1, what means are there for preventing the work from turning on its axis while it was being cut?

Ans. There are none shown in the model except the friction of the parts.

Cross-int. 24. You speak of making the curved side of a hub with a machine represented by the model marked Wheeler No. 2. Please describe the shape of the block after it had been run by the saw in that machine the first time.

Ans. It had a polygonal cross-section, with, I think, straight sides, and I should infer from the description that it was of the same size, or nearly so, at each end.

Cross-int. 25. Please describe how the hub was curved afterwards on that machine.

Ans. It is curved by going over it again with the lower part of the carriage standing still, and with the wire pawl or guide attached to the upper part of the carriage marked *b*, working in the diagonal groove of the block attached to the lower part, which caused the hub and the part *b*, upon which the mandril was mounted, to swing laterally upon its centre, which is shown in the model by the screw, which thus caused the saw to cut away the redundant material from the side of the hub.

Cross-int. 26. Do you understand that in the machine re-
275 ferred to in the thirty-third direct interrogatory, the block to be cut rested upon a bed precisely like the block in the Hayward machine?

Ans. No. I understand that it was held by dogs driven into one end of the block. The other end was held by a screw with a centre.

Whether there was any other mode described for holding the block in that machine, I do not recollect.

Cross-int. 27. Do you find in models Hale & Goodman, Stimpson, H. L. H., and Stimpson No. 2, a carriage, a pattern, tracing roll, a rotating cutter, and means for turning and means for holding the block, combined so as to co-operate to produce objects of a polygonal cross-section, whose faces are curved longitudinally, and at equal distances from their axes?

Ans. I do find those parts, with other accessory parts, combined in each of those machines to produce the result mentioned.

Cross-int. 28. Do you find all those parts so combined in the Hayward and Springfield models?

Ans. I do not.

Cross-int. 29. Do you find all those parts so combined in the models Powers No. 1, and Wheeler No. 2?

Ans. I think they are substantially in both. In Powers No. 1 a polygonal pattern or model would require to be put in a machine, instead of the model of a spoke, represented in it.

Cross-int. 30. Do you intend by your last answer to modify your answer to the twenty-third cross-interrogatory?

Ans. I do not.

Cross-int. 31. Do you mean to be understood that a circular saw is substantially the equivalent for a rotary cutter for producing all objects of a polygonal cross-section whose faces are curved longitudinally and at equal distances from their axes?

Ans. I do not. There are many forms that cannot be reached by a circular saw when operating in the manner described in connexion with Wheeler No. 2, although the circular saw is unquestionably a rotary cutter.

Cross-int. 32. Would not the model Powers No. 1 produce spokes as well, or better, if the model of a spoke there used as a patten rotated continuously on its axis throughout the operation of cutting?

Ans. No, I think not. I think it would be better to move them intermittently between the several cuts, as by that means the amount of wood to be removed in the several parts of the cut would be more uniform.

276 TUESDAY, *February 28th*.

Cross-int. 35. You have said the function of the centres and index used in the Hale & Goodman model is to hold the block and allow it to be turned a certain distance, and then to hold it again in that position. Do you find this function in the pawl and ratchet shown in Powers No. 1?

Ans. I think I do, in connexion with the other parts of the machine which are described. Its purpose in this machine was not to make polygonal sides on the object, but to present all sides of the object to the cutter in reducing it to the form of the model.

Cross-int. 36. Explain particularly how you are enabled to turn the block certain distances, one after the other, by means of the device there shown.

Ans. The ratchet wheel having its teeth substantially uniform is

an index as well as a ratchet. If it is turned one tooth at a time it will form as many sides upon the spoke as there are teeth in the ratchet. If the pawl takes two teeth at each vibration of the lever to which it is attached, there will be found upon the spoke half as many sides as there are teeth in the ratchet, and so of other numbers of teeth.

Cross-int. 37. Do you assume in your last answer that the lever which carries the pawl vibrates over equal distances each time?

Ans. I do.

Cross-int. 38. Are any means shown in that model for enabling the operator so to vibrate that lever?

Ans. Not especially. All that would be necessary, however, to do it would be to have a mark upon the end of the carriage to which the teeth of the ratchet are moved up in succession. The lever is apparently intended to be worked by the hand of the operator.

Cross-int. 39. Please read your answer to the sixteenth cross, and state what part of that function those clamps have.

Ans. The function of holding the piece in proper position upon the carriage, and in proper relation to the patterns, while it is operated upon by the cutters. But as in this machine one side only of the object is made to any particular form, the index could not be appropriately used in it.

Direct examination resumed:

Int. 1. Do you mean to be understood in your answers to the first and second cross-interrogatories, that machines of the kind represented by the Haywood model and the Springfield model, are incapable of performing successively the same operation on different sides of a block, so as to produce a regular solid with equal similar
277 sides which are irregular in their longitudinal direction? or only that the absence of the means usually employed by mechanics when the same operation is to be repeated in the machine upon different sides of the block, viz., the index, indicates that the particular machines represented by the model were not used in performing the kind of work referred to?

(Objected to.)

Ans. I do not mean to be understood that those machines are incapable of reproducing any given form upon the different sides of the same piece; as that can obviously be done by fastening the material to the carriage, either by means of an index and centres or by other means, as the only thing that is essential to be done is to present the different sides of the block to the cutter, fastened upon the carriage in proper relation to the pattern. The absence of the index in those machines is due to the fact that it was not needed to perform the work for which they were used.

Int. 2. In describing the methods for using the Hayward machine to produce work of the kind referred to, viz., solids of several similar sides and irregular in their longitudinal direction, you spoke of its being convenient to plane four out of the eight sides of a body, when a bed is used upon one part of the machine, and the remaining four

upon the other part of the machine. Why would it be convenient to do this?

Ans. Because when the first four sides were cut, the block would rest upon surfaces which are at a greater distance from the axis than the surfaces of the finished leg; but the last four surfaces of the leg would be cut with the block resting upon the surfaces already cut, which would require the bearings of the bed to be higher to that amount than the bearings of the other bed when the first four sides were cut. It would simply be a matter of convenience.

Int. 3. What would it be necessary to do in order to plane all the sides on the same side of the machine?

Ans. Simply to place upon the bed, when the last four sides were cut, a thin piece, equal in thickness to the amount cut off from the other sides.

Int. 4. Suppose a bed were employed for the whole length of the block as represented in the model, which exactly corresponded with the form to be produced like a caul, and that in consequence of irregularity in sawing the sides in the manner you have supposed, the block did not fit the bed perfectly, would that affect the form of the surface produced in the act of cutting?

Ans. It would not, unless the block was so slender as to bend to conform to it.

Int. 5. What effect, if any, would any irregularities in the rough block, which affected its position in the bed, have upon the several surfaces of the finished block, as compared with each other?

Ans. I think none at all, so far as regards the form of the
278 surfaces. It might or might not affect their relation to a common axis. That would depend upon whether it moved the axis of the block above or below some definite height.

Int. 6. Suppose the irregularity did affect the relation of the sides to a common axis, would that affect the width of the sides as compared with each other?

Ans It would.

Int. 7. Would it have any other effect upon the sides?

(Objected to.)

Ans. I do not think of any other.

Int. 8. Your attention, in cross-examination, was called to the fact that in some of the machines which you have testified in relation to the cutter and carriage were not movable to and from each other during the operation of cutting. How does the fact that the cutter and carriage are movable with respect to each other during the operation of cutting, affect the office or function of the index in such machines, as compared with its office or duty in machines where they do not so move in the operation of cutting?

Ans. It doesn't affect it at all.

Int. 9. In the twenty-seventh cross-interrogatory you were asked whether several things are not found in the Hale & Goodman, Stimpson, H. L. H., and Stimpson No. 2 models, among which are "means for turning, and means for holding the block." What part of those models do you understand to be referred to by those terms?

Ans. I understand that the centres and index attached to the carriage were the parts referred to.

Int. 10. Your answer to that and the following question were based upon that meaning of the terms?

(Objected to.)

Ans. I believe they were.

Int. 11. Will you look at the claim in the reissue patent, and see whether you find the same or similar terms used in the claim?

Ans. I do find similar terms used in the claim, with the omission of two words.

Int. 12. In view of the description of the machine contained in the specification, and of the manner in which the terms referred to are used in the claim, what part of the machine described would a mechanic of competent skill naturally understand the terms in the claim to refer to?

(Objected to.)

Ans. I think he would understand them to refer to the centres and index and carriage.

279 Int. 13. Do you so understand them?

(Objected to)

Ans. I do.

Int. 14. Is there anything else in the machine described to which those terms could properly apply?

(Objected to.)

Ans. There is not.

Int. 15. Will you look at the Hale & Goodman model, and considering the index as part of the machine, describe the manner in which the block is fastened and held in the machine? I mean the operation of fastening.

Ans. The face of the index next the block is provided with spurs, which are forced into the block and connect the two. The other end of the block is held by a common lathe centre, which is forced forward by a screw forcing its end into the block, and the block on to the spurs on the index.

Int. 16. As to this feature of the machine and this particular operation, will you compare the model with the Hayward model and the first machine constructed at Dana by Allen Goodman?

Ans. The blocks in both were held in the same way by spurs and centre at the end, but the spurs were not attached to an index as in the Hale and Goodman machine, and the operation of fastening the block to the carriage simply is the same in all three machines.

Int. 17. Will you refer to the language of the claim in the reissued patent, and state what, in view of the description of the machine, the terms "means for turning the block" apply to? Does it refer to any mechanical means which are provided for effecting the operation of the turning, or to that feature of the machine which simply admits the block to be turned by the operator without releasing it from the machine?

(Objected to.)

Ans. I understand it to apply to the index and centres, which per-

mit the block to be rotated a definite distance by the hand of the operator. No further means are employed in the machine to perform the operation mechanically.

Int. 18. Looking at what is to be done by the operator in turning the block in machines provided with an index, as shown in the Hale & Goodman model, and in a machine not provided with an index, like that shown in the Hayward model, is not this a main or essential difference between the two, that in the one case the operator turns the block by hand without releasing it from the machine except so as to enable it to rotate, while in the other case he is obliged to release it entirely from the fastenings at one or both ends of the block, and refasten it again in the same manner as at first?

(Objected to.)

280 Ans. That is the difference in the operation of the two machines.

Int. 19. In the various machines which have been referred to in the course of your depositions, in which an index is used in holding work upon a carriage, would not the same difference be found in what the operator is required to do, if, instead of the index, some of the other modes of fastening were resorted to which have been referred to by you in previous parts of your deposition, or which are commonly known among mechanics?

(Objected to.)

Ans. There would.

Int. 20. Will you state now whether or not the index has been long and *and* commonly used by mechanics when work was to be repeatedly turned to receive successive operations, to obviate the necessity and the inconvenience of repeatedly releasing and fastening the work at each operation, without regard to the kind of machine or the nature of the operation to be performed.

(Objected to.)

Ans. It has been used for a long time for the general purpose inquired of.

Cross-examination resumed:

Cross-int. 1. In the machine described in the Powers patent before referred to, is friction relied upon to prevent the turning of the work while it is being cut, and are there not mechanical means for determining how far the work should be turned upon its axis between successive cuts? or is it in these respects like the model Powers, No. 1?

Ans. I do not find in the description that this is particularly set forth, but in figure 7 of the drawings a latch is represented as resting upon what appears to be an index which would determine the distance that the piece should be rotated. There is also described a kind of a clamp which may be used with the machine for sustaining the piece to be cut against the action of the cutters. In these respects it is different from the Powers models. I do not think that friction is entirely relied upon to retain the piece in position.

Cross-int. 2. Please refer to your sixteenth direct resumed interrogatory and answer, and state whether the spurs and centres in the

two Hale and Goodman machines do not perform the same office in holding the block as is performed by the screw, the dog, and the bed in the Hayward machine.

Ans. They do, simply in holding the block to the carriage.

Cross-int. 3. (De bene esse.) Please read your seventeenth direct resumed answer, and state whether the index there referred to does not also determine the distance to which the block should be turned by the hand of the operator.

Ans. It does.

WM. C. HIBBARD.

281 *Deposition of Levi Heywood.*

I, Levi Heywood, of Gardner, in the State of Massachusetts, on oath depose and say, that I have been engaged in the chair business in said Gardner ever since the year 1825 or 1826. About the year 1837 or 1838 I invented and had constructed a machine, a model of which is now before me, and is marked on the frame "Heywood E. Merwin, U. S. C." This machine was used for getting out chair posts and backs. This machine was used at my establishment in Gardner for some twelve or fourteen years. There was gearing which connected the driving-shaft, marked A, with the feed-shafts, marked B, which is not shown on the model, and by means of this gearing the carriage was moved automatically. The levers, marked C, at the end of the machine, were used for the purpose of raising the cutters up from the piece of wood or chair post, to admit of the carriage being moved back without interfering with the cutters, and also for easing the guide-rollers up the steep curves in the pattern. When the curves were not too steep, the patterns themselves served to raise and lower the cutters. The patterns are represented by the curved pieces at the side of the carriage in the model, and the work to be planed by the piece in the centre of the carriage. One side of the work was planed at one end of the machine, and the other side at the opposite end. The patterns were varied from time to time, as different styles of work were required. This machine was built for me by Charles Nichols, who has been dead for some eighteen years. This model was built by A. B. Clark, who also assisted in building the original machine, and operated it from time to time for several years. There was a shipper by which the carriage is thrown out of gear, which is not represented in the model, but, saving the two exceptions herein stated, the model is a correct model of the original machine.

LEVI HEYWOOD.

Subscribed and sworn to by the said Levi Heywood, this 5th day of June, A. D. 1863, before me.

E. MERWIN, *U. S. Commissioner.*

The foregoing deposition may be filed by the defendants, and read in evidence upon the final hearing.

BROWNE & MAYNADIER,
for Complainants.

282 *Admissions of parties in relation to the Springfield Armory profiling machine, shown in the exhibit marked "Springfield No. 1, H. F. S., examiner."*

It is agreed and admitted by the counsel of the respective parties that the above-mentioned model is a correct model of the machine, with the exception of the methods of clamping and holding the stock till planed; in this respect the model is incomplete. In the machine itself the clamps and supports are as described in the deposition of James Stillman. This machine is now in use in the Springfield Armory, and was in use in substantially the same form before the invention of the Hale and Goodman machine, and about the year eighteen hundred and forty, and that it has been in public use at the arsenal from that time to the present. The gun-stock, after being placed on the carriage and properly clamped, is passed by the cylinder cutter so as to plane the lower side of the stock—see exhibit "Springfield No. 2, H. F. S., examiner." The carriage is then shifted to the other side of the cutter by the operator, and the top of the stock is planed as in the said exhibit. The stock is then shifted to the other carriage and again properly clamped and the two sides planed in the same manner as before, the carriage being moved in each instance by the operator. Exhibit No. 2 is a fair sample of the work done on this machine, and Exhibit No. 3, marked as before, is a fair sample of work done on the same machine, but with a different carriage, of the same general construction, the only differences being in the shape of the pattern which forms part of the carriage, and in the mode of clamping. On Exhibit No. 3 the lower side is planed throughout its whole length by the machine. The upper side is planed by the machine only to the length of the butt where the lock is put on. The other two sides are not planed on the machine at all.

BROWNE & MAYNADIER,
Solicitors for Complainants.
SMITH & BATES,
for Respondents.

283 *Specification of Wm. N. Oaks's patent.—The schedule referred to in these letters patent, and making part of the same.*

To all whom it may concern:

Be it known that I, William N. Oakes, of Dana, in the county of Worcester and State of Machachusetts, have invented a new and useful improvement in machines for cutting or planing irregular forms, the construction and operation of which I have described in the following specification, and illustrated in the accompanying drawings, with sufficient clearness to enable competent and skilful workmen in the arts to which it pertains, or is most nearly allied, to make and use my invention.

My said invention consists in the combination of two carriages running at different speeds, as hereinafter described, with a spread pattern, and the necessary tracer and cutters, as hereinafter more fully set forth.

In the accompanying drawings Figure 1 is a perspective view of my improved machine; Figure 2 is a longitudinal vertical section of it.

In cutting irregular forms in which sharp curves and abrupt elevations and depressions abound, it is found very difficult to make the tracer follow the pattern, as exceedingly sharp ascents have a tendency to press the tracer sidewise, but on account of their abruptness have little or none to raise it.

This difficulty is very seriously felt in the manufacture of pianoforte legs and other articles of a like nature, in which the cutter must rise very abruptly to produce the form required. My invention obviates this difficulty by employing two carriages, both of which have a rectilinear motion, but which are so connected by gearing as to run at different speeds, the one having the pattern upon it having the most rapid motion, and the pattern being elongated so as to reduce the abruptness of the ascent, as shown in the drawings, and further described.

A is the frame of the machine, of suitable form and dimensions to support the working parts; B is a carriage or frame which supports the pattern N, and rests upon guides upon the frame A; C is another carriage which also slides upon the frame A, in the same direction, at the same time, but not so rapidly as the carriage B. This carriage C carries the work to be cut, which is marked F, by supporting
284 it between the uprights D D, which are attached to the carriage C. The work F is held in position by two screw dogs E E. The rotary cutter-head K, to which the cutters are attached which reduce the work to form, is hung in suitable bearings in the arms G G, which form part of the vibrating frame for its support. These arms G G are connected by the bar H, and are supported at the end opposite the cutter-head K, by the shaft I, upon which they are allowed to vibrate, said shaft I being supported by the uprights J, attached to the frame A. M are the tracers which rest upon the patterns to guide the cutters.

Racks are attached to each of the carriages B and C, as shown in the drawings, to gear upon the wheel R, and the pinion Q on the shaft P. The wheel R gears into the rack T on the carriage B, and the pinion Q gears into the racks, to give motion to the carriage C, which carries the work. Rotary motion being given to the shaft P will give motion to both the carriages B and C, and in the same direction, but at altogether different speeds, the carriage B, which carries the pattern, running much faster than the carriage C. It is obvious that by this arrangement of parts the inclines up which the tracers must pass may be made much more easy in their ascent than they could be were the carriages propelled at equal speeds, and, consequently, that much sharper inclines and curves may be cut by this machine than if the speed of two carriages and the contour of the pattern and work were the same.

The particular improvement which constitutes my said invention, and which I claim as having been originally and first invented by me, is the combination of the two carriages B and C, having a rectilinear

motion at different speeds, with the elongated pattern, tracers, and cutter, for the purposes set forth, not intending to claim an elongated pattern as such, or combined with other machinery to cut irregular forms, but only its combination with two carriages having a rectilinear motion at different speeds, in the manner described.

WM. N. OAKES.

Witnesses: DANIEL STONE,
ALBERT BOSWORTH.

285 COMPLAINANTS' REBUTTER.

Deposition of Lorenzo Hale.

SEPTEMBER 2D, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Lorenzo Hale; age, 45 years; residence, North Dana; occupation, in the piano leg business at this time.

Int. 2. Are you a brother and partner of Mr. Warren Hale?

Ans. Yes.

Int. 3. Do you know of the negotiations which took place after the Hale & Goodman patent was extended, with a view to a connexion between Mr. Warren Hale and yourself, Mr. George T. Johnson, Mr. Charles N. Stimpson, and others, for the purpose of making and selling piano legs under that patent?

Ans. Yes.

Int. 4. Were you a party to those negotiations?

Ans. Yes.

Int. 5. Do you remember a meeting at Mr. Hale's office in the beginning of those negotiations, of various persons who proposed to become interested in the new concern? and if so, state who were present. I refer to the meeting which preceded the visit of certain persons of your number to Westfield to buy out Loomis, Lewis & Co.

Ans. Yes, I remember the meeting. Warren Hale, Charles N. Stimpson, Wm. N. Oaks—Joseph Fales, I think, was there—Geo. T. Johnson, and myself. That's all I recollect now. Warren Stimpson might have been there; I don't recollect.

Int. 6. Please state the general nature of the conversation which took place there, and whether any agreement was then made as to the persons who should compose the new business, or as to the name under which, or the manner in which, or the place or places at which it should be carried on.

Ans. Well, we met for the purpose then to buy the Westfield concern, but no agreement was made how to carry on the busi-
286 ness at that time. They sent, or agreed to send out, some men to see if they could buy it. They agreed to send Charles N. Stimpson, Joseph Fales, Wm. N. Oaks.

Int. 7. You say no agreement was made, at that time, how to carry on the business; was there conversation at that time upon the subject?

Ans. Yes, there was conversation.

Int. 8. Do you remember any suggestion in that conversation as to the expendiency of carrying on the business under two separate concerns, if the Westfield property should be bought? and if so, who made that suggestion? and if it was objected to, who objected to it?

Ans. Mr. Charles N. Stimpson made the suggestion; Warren Hale objected to it.

Int. 9. Do you remember what reason Mr. Hale assigned against such an arrangement? If so, please state.

Ans. He thought when it was found out it wouldn't be so well for them.

Int. 10. When what was found out?

Ans. To pretend that there was two concerns when there was not but one.

Int. 11. Was anything said about the necessity of having two men to solicit orders, if there were two ostensible concerns?

Ans. Yes, sir; I think there was. Mr. Warren Hale, I think, made the suggestion, if there was two concerns they would have to have two men to solicit orders. If only one concern, one man could do the work.

Int. 12. Upon the return of Mr. Charles Stimpson and Mr. Fales from Westfield, did another meeting take place that same evening, and were you present at it?

Ans. I don't recollect being present at the meeting, myself, but I heard the report that they had bought the concern.

Int. 13. Was any engagement made that day to go anywhere, or to do anything, with reference to forming a stock company for this business?

Ans. There was an engagement made to go to Athol the next day to see if they could agree to form a stock company.

Int. 14. Did you meet there at Athol, accordingly, the next day?

Ans. I did.

Int. 15. Were Mr. Warren Stimpson and Mr. Charles N. Stimpson there at Athol?

Ans. Yes.

Int. 16. Was the subject of forming the stock company there considered and discussed?

Ans. It was.

Int. 17. Did you adjourn from that place to meet again, and at what time and place, and for what purpose?

287 Ans. We adjourned to meet the next Monday at Mr. Hale's office in Dana to see what the name of the company should be, &c.

Int. 18. Did you meet accordingly on Monday morning?

Ans. Yes.

Int. 19. At that meeting was there a chairman, and who was he? and was there a clerk who made records of the meeting, and who was he?

Ans. There was a chairman, Joseph Fales; George T. Johnson was clerk.

Int. 20. Is the safe in that office the town's safe?

Ans. It was then.

Int. 21. Was Mr. George T. Johnson then the town clerk?

Ans. Yes.

Int. 22. Was there another safe in that office for the private use of Hale & Co.?

Ans. Yes.

Int. 23. Was the record of this meeting put into either, and which one of these safes?

Ans. I think Mr. Johnson put it in the town's safe; he used it altogether for his business and the town's.

Int. 24. Was there any chairman, clerk, voting, or record at any previous meeting of the associates, either at Dana or Athol?

Ans. No.

Int. 25. Was anything said at this meeting on Monday in the way of objection to Mr. Lindsay's coming into the concern?

Ans. No.

Int. 26. Before the voting commenced was the fact of his presence and proposed participation in the business alluded to in the meeting?

Ans. Yes.

Int. 27. State all that was said, as nearly as you can, on that subject.

Ans. The most I can remember is the question was asked, Shall we let him come in? and three of them, I can recollect, said Yes, let him come in, and no one said anything to the contrary.

Int. 28. Did Mr. Lindsay then proceed to vote with the rest upon the several propositions which came before the meeting?

Ans. Yes, he voted.

Int. 29. Please state what was proposed, discussed, and voted at said meeting.

Ans. Well, they chose a moderator and clerk, in the first place; then see what the name of the company should be. They balloted a number of times before they got a choice, and finally got a vote to call it Warren Hale & Company.

288 Int. 30. Was anything decided at that meeting as to the raising of funds to meet the first payment of the Westfield property?

Ans. There was a note made amongst them for a thousand dollars, I believe, and they got the money on it at the bank.

Int. 31. Did all persons present take part in the voting which was done at that meeting?

Ans. Yes.

Int. 32. Was anything said at that meeting by any one as to the matters voted upon having been already settled by agreement, and not open to vote?

Ans. I do not think they did.

Int. 33. Did anybody make any objection to, or protest against, any of the proceedings?

Ans. No, not to my knowledge.

Int. 34. Did you attend to the proceedings of the meeting, so that if any such thing had been said or done you would have known the fact?

Ans. I think I did.

Int. 35. Do you remember meeting Mr. Charles N. Stimpson and Mr. Oaks in Dana two or three days after this meeting, and having a conversation with them upon the subject of their selling out their interest in the Westfield purchase?

Ans. I remember meeting them, and having a conversation upon that subject.

Int. 36. Was your meeting with them accidental, or did they come to see you, or you go to see them?

Ans. I saw them in the road near Mr. Oaks's house, and the meeting was accidental.

Int. 37. Was your conversation with them at that meeting the only conversation you had with them on that subject?

Ans. Yes.

Int. 38. Was Mr. Allen Goodman present during any part of such conversation?

Ans. No.

Int. 39. Was this upon the morning after Mr. Stimpson and Mr. Oaks had arrived from Westfield, as you understood from them?

Ans. I think it was.

Int. 40. Had Mr. Warren Hale and Mr. Johnson then gone to New York, and when had they started?

Ans. Yes, that morning, I think.

Int. 41. How early in the morning, and what was the necessity of so early an hour?

289 Ans. I don't know what time they started; it was necessary to start early on account of getting the stage at Greenwich village to go to Belchertown, and there take the cars that was to arrive in New York that night.

Int. 42. Did you know until you met Mr. Stimpson and Mr. Oaks in the road that day that they were in town?

Ans. Yes, I did.

Int. 43. Did you hear so that morning or the day before?

Ans. Well, I think I heard the night before.

Int. 44. So far as you know, did either Mr. Warren Hale or Mr. George T. Johnson, when they started for New York, know that either Mr. Stimpson or Mr. Oaks were in town?

(Objected to as leading.)

Ans. No.

Int. 45. So far as you know, were either Mr. Hale or Mr. Johnson, when they started for New York, expecting any visit or proposition from Mr. Stimpson or Mr. Oaks, or any one in their behalf?

(Objected to as leading.)

Ans. No.

Int. 46. Was there anything known to you then, or known to you since, which would justify Mr. Stimpson or Mr. Oaks in believing that your brother and Mr. Johnson had started for New York slily or secretly, or so as to avoid meeting them or either of them?

(Objected to as leading.)

Ans. No.

Int. 47. Did Mr. Warren Hale, or Mr. Johnson, or Mr. Goodman, or Mr. Lindsey, to your knowledge or belief, or did you yourself, ever try to avoid any meeting with or any proposition from Mr. Oaks or either of the Messrs. Stimpson relative to the subject of the Westfield purchase and the proposed leg business?

(Objected to as leading.)

Ans. No.

Int. 48. Will you state as fully as you can what Messrs. Stimpson and Oaks said to you when you met them in the road—what conversation passed between you?

Ans. Mr. Stimpson said he'd made up his mind he would sell out; I told him that my brother had gone to New York, and did not see how anything could be done then; he said it must be done that afternoon or it couldn't be done at all.

Int. 49. What did he say he would do if it was not done that afternoon?

290 Ans. He intimated that he should go on and manage it according to his own liking.

Int. 50. What was it that was to be done that day or not at all?

Ans. The buying them out.

Int. 51. Did he not give you, that is you and your brother and Mr. Johnson, until the next Monday to make up your minds about buying him out?

(Objected to as leading.)

Ans. No.

Int. 52. Mr. Stimpson testifies that he did; are you sure it is not so?

(Objected to as leading.)

Ans. Yes.

Int. 53. Do I understand you that there was no conversation between Mr. Stimpson and Mr. Oaks and Allen Goodman at which you were present?

(Objected to.)

Ans. There was none at which I was present.

Cross-interrogatories:

Cross-int. 1. How long have you been engaged in the leg business?

Ans. About five years.

Cross-int. 2. I mean how long since you have begun work at the business, either for yourself or some one else?

Ans. I worked in the business from 1843 to 1850.

Cross-int. 3. For whom did you work during that time?

Ans. I worked for Warren Hale, my brother.

Cross-int. 4. Are the machines which you now use at Dana for planing legs constructed like the model marked Hale & Goodman, Exhibit 1, particularly as respects the manner in which the cutting cylinder is suspended and moved?

(The counsel for complainant objects to cross-examination on any matter not the subject of examination in chief.)

Ans. It is put on a little different from that.

Cross-int. 5. Describe how it is put on.

Ans. Instead of these arms going down by the side they come out back.

Cross-int. 6. Are the arms pivoted at the end of the machine?

Ans. They swing on a roller.

Cross-int. 7. The cutter then, instead of moving directly up and down in a straight line as it is raised and lowered, moves in the arc of a circle, does it not?

Ans. Exactly so, I should think.

291 Cross-int. 8. What was the object in making this change in the construction of the machine?

Ans. Probably because it was better. I don't know any other.

Cross-int. 9. In what respect was it better?

Ans. Well, I suppose I could tell you some things about it. One thing is it is liable to be a little stiffer.

Cross-int. 10. Did you ever use a machine which was constructed like the model?

Ans. Yes, sir.

Cross-int. 11. When and where?

Ans. At North Dana, the first machine that I used. That is what I mean, with the up and down carriage.

Cross-int. 12. How long did you use that machine?

Ans. I don't recollect exactly how long it was. We used that machine till we built a new one and got that agoing.

Cross-int. 13. State as nearly as you can when you built the new machine?

Ans. I should think it was about eighteen years ago last winter.

Cross-int. 14. How soon after you commenced work in the leg business was the first machine built?

Ans. The machine was built before I commenced work.

Cross-int. 15. Then it was used three or four years, was it not?

Ans. Not so long as that.

Cross-int. 16. About how long do you think it was used, according to the best of your recollection?

Ans. Perhaps a little over a year.

Cross-int. 17. What kind of legs did you plane on that machine—four-square legs or eight-square legs?

Ans. Both.

Cross-int. 18. Did the machine differ, in any other respect, from those which you now use?

Ans. Yes, some.

Cross-int. 19. In what respect did it differ?

Ans. It had a wooden carriage.

Cross-int. 20. Was there any other difference?

Ans. The cylinder head had a lead balance wheel on instead of an iron one.

Cross-int. 21. Were there any differences except in the material used? I mean differences in the construction.

Ans. Yes. Here you see there is a dial, or index, on this. There was not on that, and you had to take the leg out, or nearly out, to turn it.

292 Cross-int. 22. Did the end of the leg rest upon any support under it?

Ans. No, I think not.

Cross-int. 23. Was it held against the head block simply by the pressure of the screw, or were there points, or dogs, in the head block which it was pressed on to?

Ans. There was some points in one end.

Cross-int. 24. What was there in the other end?

Ans. A wooden screw, I believe.

Cross-int. 25. Were there any other differences except this last which you have mentioned—I mean in construction?

Ans. There was nothing very essential.

Cross-int. 26. State what differences there were, whether you regard them as essential or not.

Ans. These that we have now were not taken from that pattern—there was a difference, all round, perhaps—a little, in size and form.

Cross-int. 27. Is the cutter moved up and down in the same way as it was in the first machine?

Ans. In the same manner, that is, by means of a rack and pinion.

Cross int. 28. How is the carriage which carried the work moved backwards and forwards in the first machine, how, in the one next after that, and how, in those used now?

Ans. About the same as in this model.

Cross-int. 29. How was the work prepared for planing when you used that first machine?

Ans. The blocks were sawed out with a whip saw.

Cross-int. 30. Were they brought in their general form, as to their longitudinal direction, to the same general outline as that they were to have after being planed?

Ans. As near as we could get them.

Cross-int. 31. What became of that first machine?

Ans. The last I saw of it 'twas out of doors rotting.

Cross-int. 32. When was that and where?

Ans. I see a piece of it near the shop not long ago.

LORENZO HALE.

293 *Deposition of George T. Johnson.*

AUGUST 30, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is George T. Johnson; residence, Athol, Massachusetts; age, 41 years; occupation, manufacturer.

Int. 2. Were you ever in partnership with Mr. Charles N. Stimpson in the business of making and selling piano legs? If so, where was it, and about what time did you go in?

Ans. I was, at North Dana. I went in, I think, in the fall of 1854.

Int. 3. What was the name of the concern, and mention the names of all the partners?

Ans. Johnson, Stimpson & Co., consisting of Charles N. Stimpson, William and Warren Stimpson, Nelson Bosworth, Allen Goodman, Silas F. Lindsey, and myself.

Int. 4. What was the name of the concern before you went into it, and who, at that time, were its members?

Ans. I don't know that I can answer that exactly. W. and C. N. Stimpson owned a part, Allen Goodman and Warren Stimpson the other part. They did business at one time as Stimpson & Doane, at another as W. & C. N. Stimpson.

Int. 5. What was your share in the business after you became a partner?

Ans. One seventh part—an equal share.

Int. 6. At the time you went into that concern did they have a contract pending with Lyman Wheeler to make legs for them at so much a set?

Ans. They did.

Int. 7. After you joined the concern was that contract terminated? and if so, how long after you joined, as near as you can say?

Ans. The contract was terminated between one and two years after I joined, I think.

Int. 8. What were the circumstances which led to Johnson, Stimpson & Co. terminating that contract?

Ans. We had frequent complaints from our customers of bad work, which we could trace directly to Mr. Wheeler. The legs were not thoroughly seasoned, and cracked badly.

Int. 9. Was this bad work mentioned by your firm to Mr. Wheeler, and more than once?

Ans. Yes, sir, it was.

294 Int. 10. When the firm resolved to wind up the contract with Mr. Wheeler, if they could, did they appoint any of their members a committee to attend to the subject, and who were so appointed?

Ans. They did. They appointed Mr. Goodman and myself.

Int. 11. Did you and Mr. Goodman meet Mr. Wheeler accordingly, and conduct the negotiations of the firm with him for winding up his contract?

Ans. We did.

Int. 12. Was the agreement which was then made with Mr. Wheeler, in winding up his contract, put in writing?

Ans. I think not.

Int. 13. Did he ask you and Mr. Goodman to put it in writing, and did you decline to do so?

Ans. I've no recollection of it.

Int. 14. Did any member of your firm, so far as you know, object to having such agreement in writing?

Ans. No.

Int. 15. In that agreement did you give him the right to continue to make certain articles? If so, what?

Ans. We gave him the right to make melodeon legs and newel posts.

Int. 16. Did you refuse to trade with him unless he would use for that purpose the machine he had, instead of building one on his own plan, if he had one?

Ans. I did not. We did not.

Int. 17. Was any such condition, or restriction, mentioned in the negotiations between Mr. Wheeler for winding up his contract?

Ans. There was not.

Int. 18. Did you ever hear any such condition or restriction suggested by any member of your firm?

Ans. I never did.

Int. 19. Did you ever hear any member of your firm express any apprehension pending that contract that Mr. Wheeler, if not restrained by agreement, could, or would or might get up, or build any leg machine which would avoid your patent and compete with you, or anything to that effect?

(Objected to as leading.)

Ans. I have no recollection of hearing anything of the kind

Int. 20. Was anything said, in the negotiations between Mr. Goodman, Mr. Wheeler, and yourself, as to his using or not using any machine which he pleased for making those legs which he was to have permission to make?

Ans. There was not. I suppose he was to use the machine which he had, because I know of no other that he would be likely to use.

295 Int. 21. Were you in the concern of Johnson, Stimpson & Co. when they sold out to Mr. Hale, shortly before the original term of his patent expired?

Ans. I was.

Int. 22. For what price did they sell?

Ans. Fifteen thousand dollars.

Int. 23. Had that property been appraised by your concern in taking account of stock previously to that time, and how long before?

Ans. It had, I think in January previous; the sale was in May.

Int. 24. At how much was it appraised?

Ans. About nine thousand dollars.

Int. 25. Did the members of your firm mark for the price among themselves? and if so, how did they mark?

Ans. I don't think they did. They did when they came to sell to Mr. Hale.

Int. 26. Did your firm, in selling out to Mr. Hale, agree to assist him in getting his patent extended?

Ans. We did.

Int. 27. Did you understand at the time of such sales that Johnson, Stimpson & Co. would have no right under the extension of the patent?

Ans. Yes, I did so.

Int. 28. Was it so understood by your partners as stated among yourselves?

Ans. It was.

Int. 29. Whose professional advice to that effect did they have?

Ans. My information came through other members of the firm. I think they consulted with Mr. Gifford—George Gifford, of New York.

Int. 30. Do you know of the negotiations which took place after the Hale & Goodman patent was extended, with a view to a business connexion between Mr. Hale, Mr. Charles Stimpson, yourself, and others, for the purpose of making and selling piano legs under the patent?

Ans. I do.

Int. 31. Do you remember a meeting, at Mr. Hale's office, in the beginning of these negotiations, of various persons who proposed to become interested in the new concern? and if so, state who were present. I refer to the meeting which preceded the visit of certain persons of your number to Westfield to buy out Loomis, Lewis & Co.

Ans. Yes, I remember it.

Int. 32. Please state the general nature of the conversation which took place there, and whether any agreement was there made as to the persons who should compose the new business, or as to the name under which, or the manner in which, or the place or places at which, it should be carried on.

296 Ans. We there proposed to purchase the property at Westfield owned by Loomis, Lewis & Co., and put the two concerns together, and Mr. Oaks, Mr. Fales, and, I think, Mr. Charles Stimpson, were selected as a committee to go to Westfield to buy that property if they could. It was suggested by Mr. Stimpson, I think, that if the property was bought, it should be carried on under two separate heads; but it was objected to by Mr. Hale—Mr. Warren Hale; he thought it would soon be found out in the market that we were carrying it on in that , and that it was really one concern, and that, if it was found out, it would not be as well for us. There were various other suggestions, but no positive agreement.

Int. 33. Did Mr. Charles Stimpson, Mr. Oaks, and Mr. Fales go to Westfield accordingly, to make the purchase?

Ans. They did.

Int. 34. Upon their return from Westfield, did another meeting take place, and how soon after, and where?

Ans. I think the same evening, after they returned, we held a meeting in Mr. Hale's office, to hear the report of the committee. They reported that they had purchased the property, and the price which they had agreed to pay. It was there proposed to form a stock company of this concern, and we adjourned from there to meet at the hotel in Athol next day, for that purpose.

Int. 25. Did you so meet at Athol and what took place there?

Ans. We did. I got a copy of the revised statutes and read the law relating to a stock company, and we finally concluded that it required too much machinery and gave that up. We had some other talk relative to forming a company, but finally adjourned from there to meet at North Dana again, at the office of Mr. Hale, on Monday morning.

Int. 36. Who were present on Monday morning at such adjourned meeting?

Ans. Messrs. Warren Hale and Lorenzo Hale, Chas. and Warren Stimpson, Joseph Fales, Allen Goodman, Silas F. Lindsey, Wm. N. Oaks, and myself.

Int. 37. Was Mr. Wm. N. Oaks there, or did he remain at Westfield?

Ans. No; Mr. Oaks was *not* there; he was at Westfield.

Int. 38. At the meeting at Athol was anything said or decided as to the name or names under which, the place or places at which, or the manner in which, the business should be conducted?

Ans. There was talk about that, but nothing agreed upon.

Int. 39. What organization, if any, took place at that meeting on Monday? Who presided, if anybody? Who was clerk, if anybody? And were any records made, and where are they?

Ans. Mr. Fales, I think, was selected to preside, though I
297 am not exactly certain about that. I was clerk, and made records of the meeting, but I don't know where they are. For a long time they were in the safe in a drawer with some other papers, and I think are still in the office of Warren Hale & Co.

Int. 40. Was there any chairman, clerk, voting, or record at any previous meeting of the associates?

Ans. Not that I recollect of.

Int. 41. Was anything said at this meeting on Monday in the way of objection to Mr. Lindsey's coming into the concern? If so, what was said, and by whom?

Ans. There was no objection raised in the meeting, that I heard.

Int. 42. Who was Mr. Lindsey?

Ans. A brother-in-law of Mr. Hale, and former partner of Johnson, Stimpson & Co.

Int. 43. What sort of a man was he as to intelligence, character, and standing in the town?

Ans. Good. He was, either before or after that time, one of the selectmen of the town.

Int. 44. Was any personal objection to Mr. Lindsey suggested by anybody, in or out of the meeting, to your knowledge?

Ans. Mr. C. N. Stimpson objected to him to me before going in to the meeting. His principal objection was to the introduction of another member, making the shares smaller. He made no objections to him personally.

Int. 45. Now please state what was proposed, discussed, and voted at said meeting on Monday.

Ans. After organizing, the first subject was what the name of the

firm should be, which raised a discussion as to having the two concerns carried on separate, and finally a ballot was taken, and, after several ballots, it was decided that it should be Warren Hale & Company, both carried on under one head. We next discussed the raising of the funds to meet the first payment, which was done by a note, which, I think, was made by Mr. Joseph Fales and Charles N. Stimpson, and indorsed by Warren Hale, or Warren Hale & Company.

Int. 46. What was said or done in the meeting, if any thing, in regard to Mr. Lindsey's joining the concern, and the share that he should have?

Ans. Nothing to my knowledge. The shares were equal. Mr. Goodman and Mr. Oaks were to own one share between them.

Int. 47. Did all persons present take part in the voting which was done upon one proposition and another?

Ans. They did.

Int. 48. Was anything said at that meeting, by any one, as
298 to any of such propositions having been already settled by agreement, and not open to vote? If so, who said it, and what was it?

Ans. There was not.

Int. 49. Was any objection to, or protest against, any of the proceedings made by any one, and by whom?

Ans. There was none that I remember.

Int. 50. After the meeting, did Mr. Charles N. Stimpson say anything to you in the way of objection to what had been done at the meeting? If so, state how soon after, where it was, and what passed.

Ans. Directly after the adjournment I went to harness my horse to go to the bank to raise the money on this note. Mr. C. N. Stimpson came to the barn, and very soon after his brother Warren came. Mr. Charles Stimpson stated that he was dissatisfied with the proceedings, and believed that he shouldn't have anything more to do with it. I asked him his reasons, and he objected again to Mr. Lindsey's being one of the firm, and said that he had heard some things which I had said. I asked him what that was. He said that I had made the remark that I had been with the Stimpsons long enough. I denied that, and remarked that, if I was dissatisfied with them, I should not have proposed to go in company with them again. We had some further conversation. The name of the firm, I think, but am not certain, he mentioned as one objection, and I told him that if he had decided not to go along, I should not offer the note which I then had to the bank for discount, and that I must have a decided answer. He finally decided to go along according to our agreement. I then went to Athol and got the note discounted, and returned the money to Fales.

Int. 51. Was the question whether Mr. Stimpson would abide by the proceedings of the meeting left open, in any degree, when you went to Athol to get the note discounted?

Ans. I did not so understand it.

Int. 52. Was any thing whatever said by Mr. Stimpson to that effect? If so, what was it?

Ans. Not that I recollect of.

Int. 53. When did you next see Mr. Charles N. Stimpson, and where?

Ans. At Belchertown, in the stage.

Int. 54. Is it then true that after you went to Athol, and before you met him at Belchertown, he had an interview with you, in which you asked him what conclusion he had come to, and he replied that he had concluded it was not best for him to go into it, or any thing to that effect?

(Objected to.)

299 Ans. I didn't have any conversation with him after I met him at the barn until I met him at Belchertown, and don't think I saw him until then.

Int. 55. Did you go to Westfield that day or the next day? If so, at whose request? State the circumstances, and what was said or what passed?

Ans. I went to Westfield the day I met him at Belchertown. I started about 4 o'clock in the morning; Mr. Lindsey called me up and said Mr. C. N. Stimpson, and Mr. Fales, and Mr. Warren Stimpson were going to Westfield for the purpose of releasing Mr. Fales and to have Warren take his place, and he thought we had better go down and advise Mr. Fales to hold on, and, if necessary, to release Mr. Stimpson and take the property ourselves. We went accordingly to Westfield.

Int. 56. Who did you see or talk with, if any one, at Westfield in regard to this matter, on your arrival there?

Ans. I saw Mr. Fales there and Mr. Oaks, though I did not see Mr. Oaks until in the afternoon perhaps. I had no conversation with Mr. Stimpson during the day. I advised Mr. Oaks to keep along with us and let Mr. Stimpson go, if he insisted upon it, and Mr. Lindsey and myself proposed to Mr. Fales to see Mr. Charles Stimpson, and say to him we would take the property and release him from the bond to Loomis, Lewis & Co. Mr. Fales reported that he had seen Mr. Stimpson, and that he declined to let us have it, saying he had a choice who he let have it, and that he (Fales) thought he did not intend to give it up. I had no further talk with them, but took the train in the evening for Boston.

Int. 57. How many days was it after you left Westfield, that you were in Dana again?

Ans. I think two days, one or two.

Int. 58. Did you go to New York with Mr. Warren Hale, from Dana, when you got there?

Ans. I did, the next day.

Int. 59. Was it then on the third day after you were at Westfield that you started from Dana to New York?

Ans. I think it was.

Int. 60. Did you leave Dana for that purpose in the morning or in the evening?

Ans. In the morning.

Int. 61. For what purpose did you and Mr. Hale go to New York, and what did you do there?

Ans. I went for the purpose of assisting him in getting orders for work. That was what we did there.

300 Int. 62. When you returned to Dana from Boston, did you hear anything of a visit of Mr. Stimpson and Mr. Oaks to Dana?

(Objected to.)

Ans. I did not.

Int. 63. When you and Mr. Hale went to New York, did you or did he, to your knowledge, know that Mr. Stimpson or Mr. Oaks, or anybody in their interest, had been to Dana, or were expected there?

Ans. I did not.

Int. 64. Did you, or did Mr. Hale to your knowledge, at the time of going to New York, or at any time before, have any idea or purpose of avoiding any person or any proposition in regard to this leg machine business?

Ans. We did not.

Int. 65. Did Mr. Chas. N. Stimpson, previously to your going to New York, or at any time, ever make to you, or to any one else to your knowledge, any proposition to give up his interest in the Westfield purchase?

(Objected to as leading.)

Ans. He did not.

Int. 66. Did he ever intimate to you, or to any one else to your knowledge, his willingness to do so?

(Objected to as leading.)

Ans. He did not. [Adjourned to 31st.]

Int. 67. Did you continue with the firm of Johnson, Stimpson & Co. until that firm sold out to Mr. Hale?

Ans. I did.

Int. 68. During the time that Mr. Wheeler's contract with the company continued, and while you were a member of the company, was that contract and its advantages or disadvantages to the company a frequent subject of conversation among you?

Ans. It was.

Int. 69. Did you ever hear it suggested by either of the Messrs. Stimpson, or any other member of the company, that the giving of that contract to Mr. Wheeler was for the purpose, or had produced the result, of keeping him from building any rival machine of his own, or anything to that effect.

(Objected to as leading)

Ans. I did not.

Int. 70. What is the only reason, if there is but one, that you ever heard suggested by any member of Johnson, Stimpson & Co. previous to this litigation, why such contract was given to Mr. Wheeler?

(Objected to as leading.)

Ans. The contract was given previous, and we assumed it. I think I've heard Mr. Charles N. Stimpson or Mr. Doane say it was

301 because they had more orders than they could fill.

Int. 71. Do you remember any complaint made by yourself

or any other member of Johnson, Stimpson & Co. to Mr. Wheeler about the extent to which he was using the privilege of making work for himself?

Ans. I do *do* not, but I might have done so.

Int. 72. Was any proposition made to you, or to your firm to your knowledge, that Mr. Wheeler should give up the use of the machine he was using, and build one upon his own principle, giving bonds that his machine should not infringe the Hale patent, and that he would fill his contract with your firm on such machine of his own? This proposition, or any part of it?

Ans. There was not.

Int. 73. When the firm of Johnson, Stimpson & Co. bought Mr. Wheeler's Hale machine, after the fire in which both shops were burned, was any restriction or condition whatever, to your knowledge, imposed upon Mr. Wheeler as to what machine he should provide himself with to use in its place?

(Objected to as leading.)

Ans. None to my knowledge.

Cross-examination:

Cross-int. 1. What business were you and Mr. Lindsey engaged in before the firm of Johnson, Stimpson & Co. was formed?

Ans. We kept a store there.

Cross-int. 2. Did you continue to carry on that business as part of the business of Johnson, Stimpson & Co., after that firm was formed?

Ans. We did for one or two years; two years, I think, perhaps a little more.

Cross-int. 3. Did you carry it on until after the termination of the contract with Mr. Wheeler?

Ans. I am not certain about that. It was about the same time though. I should think that Mr. Lindsey was out though, and the store business given up.

Cross-int. 4. While you carried on the store business in connexion with the piano leg business, who had the principal charge and management of the store, and who had the principal care and direction of the piano leg business?

Ans. I kept the books for both branches, and Mr. C. N. Stimpson and myself managed the business more particularly abroad.

302 Cross-int. 5. Who had the immediate charge of the shop, and the manufacturing of legs?

Ans. Mr. C. N. Stimpson had when at home.

Cross-int. 6. Did you spend your time at the store or at the shop principally?

Ans. When at home, principally at the store and office. I bought the goods for the store, and assisted Mr. Stimpson in carrying on the piano business abroad.

Cross-int. 7. Who bought the stock or lumber at the shop?

Ans. The first part of the time, Mr. Wm. Stimpson, chiefly; the latter part, Mr. Chas. Stimpson and myself.

Cross-int. 8. In Mr. Chas. Stimpson's absence, who had the imme-

diate supervision of the shop, and attended to the manufacture of the work and its acceptance, the boxing it up and sending it off?

Ans. Mr. Warren Stimpson, and Mr. Allen Goodman, and Mr. Bosworth. Mr. Bosworth had more especially the charge of the veneering; Mr. Goodman and Mr. Stimpson attended to the other branches.

Cross-int. 9. What was Mr. Lindsey's share of the business?

Ans. He assisted in the store and attended to collecting.

Cross-int. 10. What is the relationship existing between yourself, Mr. Warren Hale, Mr. Loronzo Hale, Mr. Lindsey, and Mr. Fales?

Ans. Mr. Fales is my brother-in-law; I am not related to any of the other parties mentioned; Mr. Fales is a brother-in-law of the two Hales and Mr. Lindsey; Mr. Loronzo Hale and Mr. Warren Hale are brothers.

Cross-int. 11. At the meeting you have spoken of on a Monday at Mr. Hale's office in Dana, was anything done about drawing up papers for the copartnership which it was proposed to form?

Ans. I think not; I went directly after the adjournment to the bank.

Cross-int. 12. Was any arrangement made as to the manner in which the property of the company was to be held, particularly the real estate?

Ans. I do not think there was at that time.

Cross-int. 13. In whom was the title to the Dana property at that time?

Ans. I think in Warren Hale.

Cross-int. 14. Were any other details of the arrangement of the proposed company, and the manner in which it should be managed or carried on, settled at that meeting, or any previous one, excepting such as you have mentioned?

Ans. Not that I recollect of.

Cross-int. 15. Was any attempt made after that time to bring the proposed partners together for any purpose connected with the formation of the proposed company or its business?

303 Ans. I think we had a meeting in the evening after I returned from the bank.

Cross-int. 16. Who was present at the meeting?

Ans. I don't recollect whether they were all present except Mr. Charles Stimpson, who was not, nor Mr. Oaks, who was at Westfield.

Cross-int. 17. Was Mr. Warren Stimpson there?

Ans. I don't recollect whether he was or not.

Cross-int. 18. Was Mr. Charles Stimpson or Mr. Warren Stimpson notified of that meeting before it was held, in season to attend it?

Ans. Not to my knowledge; I think that was an adjourned meeting from the morning.

Cross-int. 19. Will your records show whether it was or not?

Ans. I think they will if I can find them.

Cross-int. 20. What was done at that meeting?

Ans. There was no action. I simply reported that I had got the money for them. Mr. Chas. Stimpson was not there. It was a sort of informal meeting, and we either adjourned or dissolved. At any rate we had no more meetings.

Cross-int. 21. Do you know where Mr. Charles N. Stimpson was that evening?

Ans. I do not, but I heard he had gone to New Salem.

Cross-int. 22. Do you mean to say positively that you did not see him again, or converse with him upon the subject of the proposed company, before you met him at Belchertown, or only that you do not remember seeing him, or having any conversation with him?

Ans. I have no recollection of seeing him or conversing with him, and think I should remember it if I had.

Cross-int. 23. Did you have any interviews with any of the parties in relation to the business on the Saturday evening after you returned, or during the Sunday after you returned from Athol?

Ans. I might have had, but don't recollect any in particular.

Cross int. 24. Do you know whether any of the parties met at Mr. Hale's office on that Sunday evening?

Ans. I have not the slightest recollection of it.

Cross-int. 25. Did you, during the day or evening preceding the day you went to Westfield, have any conversation with Mr. Fales or any of the other parties in relation to this business?

Ans. I presume I did.

Cross-int. 26. With whom?

Ans. I have no recollection of any particular one.

304 Cross-int. 27. Did you have any with Mr. Fales?

Ans. I presume I did. I think it likely I did with all of those that were present.

Cross-int. 28. Do you remember anything that Mr. Fales said to you during that day?

Ans. I cannot state any particular conversation.

Cross-int. 29. Why were there no more meetings called of all the parties?

Ans. I can't tell you. I had no particular desire to go on any further in the quarrel.

Cross-int. 30. What quarrel was there at that time? I mean after the time you met Mr. Stimpson at the barn, when, as you say, he decided to go on. Who quarrelled between that time and the time you met him at Belchertown?

Ans. There wasn't any at that time.

Cross-int. 31. What did you say to Mr. C. N. Stimpson during the ride to Westfield, or while you were at Westfield?

Ans. I stated to him, on getting into the stage, that I thought I would go down and look his purchase over. I don't recollect that I spoke to him while in Westfield.

Cross-int. 32. Did you say anything to him about his change of purpose as to going on with the proposed company?

Ans. I did not.

Cross-int. 33. Was anything said at Westfield about going on with the company in the same manner in which it was originally proposed, or as it was proposed on Monday at Mr. Hale's office?

Ans. Not that I am aware of.

Cross-int. 34. Why was not the matter discussed there?

Ans. Mr. Fales stated that Mr. Stimpson was determined not to go on.

Cross-int. 35. When did he make that statement and where?

Ans. At Westfield, the day we were there.

Cross-int. 36. You did not see Mr. Stimpson after Mr. Fales gave you that information?

Ans. I did not.

Cross int. 37. Did you accept that information as conclusive that the company was not to keep, or make no further effort to carry out, the original plan, or the modified one made on Monday?

Ans. I did, so far as the Stimpsons were concerned.

Cross-int. 38. How soon after you arrival in Westfield did Mr. Fales give you this information?

Ans. I cannot say, but during the afternoon we were there.

305 Cross-int. 39. Did you, or any of the proposed partners, make any demand upon him to go on and form the proposed company?

Ans. I did not. None of the others to my knowledge.

Cross-int. 40. Did you, or any of the parties to your knowledge, ever make any demand upon him for your or his share of the purchase, and offer to pay his or your share of the proposed price?

Ans. I did not. None of the others to my knowledge.

Cross-int. 41. Between the time when you met Mr. Stimpson near the barn, and the time when Mr. Fales communicated to you the statement that Mr. Stimpson did not intent to go on with the company, what quarrel had there been of which you had any personal knowledge?

(Objected to because the witness has not testified that there was any quarrel at that time, nor can any such statement be fairly implied from his testimony.)

Ans. Not any.

Cross-int. 42. When you left Westfield for Boston, did Mr. C. N. Stimpson, Mr. Oaks, Mr. Fales, Mr. Lindsey, and youself leave in the cars together?

Ans. I think Mr. Lindsey left with me as far as Springfield. The others did not to my knowledge.

Cross-int. 43. Did you know of Mr. Fales paying the one thousand dollars while he was at Westfield at that time?

Ans. I did not.

Cross-int. 44. Do you know where he went when he left Westfield, and whether any arrangement was made before he left Westfield that Mr. Oaks should go up to Dana?

Ans. I do not.

Cross-int. 45. What was your business in Boston?

Ans. I think it was connected with our old business, Johnson, Stimpson & Co.

Cross-int. 46. Did you meet Mr. Hale there?

Ans. I did not.

Cross-int. 47. When did you first meet him, and where, after you were at Westfield?

Ans. I can't say when I first met him. It would be at Dana.

Cross-int. 48. What was said between you as to the formation of the company or as to the purchase of the property?

Ans. I don't recollect there was anything said.

Cross-int. 49. How soon after you first met him did you start to go to New York to solicit orders?

Ans. I think, the next morning.

Cross-int. 50. What parties did you see for that purpose in New York?

306 Ans. I recollect one firm distinctly, I see a good many, Steinway & Sons.

Cross-int. 51. Did you procure any orders?

Ans. I am not sure of that, but I think we did.

Cross-int. 52. During the next two or three months after these transactions, did you have any negotiations or communications, either verbal or written, with Mr. Fales as to going on with the leg business, either at Dana or Westfield, or as to anything connected with that business or the property at either place?

Ans. I might have talked to him or written to him in relation to the old matter, but not with any intention of going on with the business.

Cross-int. 53. Were there no suggestions made as to the formation of a new company, or as to the purchase of the property either at Dana or Westfield?

Ans. Not any.

Cross-int. 54. Was the contract with Mr. Wheeler, which you say was terminated by yourself and Mr. Goodman, made with the firm of Johnson, Stimpson & Co.?

Ans. It was not.

Cross-int. 55. With whom was it made?

Ans. The contract purported to have been made by Stimpson & Doane.

Cross-int. 56. Had Johnson, Stimpson & Co. assumed that contract as between themselves and the firm of Stimpson & Doane?

Ans. Yes, they had.

Cross-int. 57. Had Mr. Wheeler ever entered into any agreement releasing or discharging Stimpson & Doane, and accepting Johnson, Stimpson & Co. in their place?

Ans. I am not certain, but I think not.

Direct resumed:

Int. 74. When you arrived at Dana from Boston, and before you and Mr. Hale started for New York, was nothing said between you as to what had passed a few days before, when you were at Westfield? Did Mr. Hale know what had passed, and how did he know it?

Ans. I presume I did tell him. I don't know that he had any information from any other source.

Int. 75. If he made any reply that you remember, state what it was.

Ans. I can't recollect the conversation.

Int. 76. Why did not you, or any other of the associates,
307 make any demand upon Mr. Charles N. Stimpson to go on with the business agreed upon at the meeting at Dana on Monday, after he, Mr Stimpson, had finally refused to do so?

Ans. Because I didn't think we should get along pleasantly together after what had passed.

Int. 77. Why was no attempt made to have another meeting of the associates after that, as far as you know?

Ans. It seemed to be given up by common consent. I had no particular reason for it.

Int. 78. Why was no offer made to take and pay for your proportion of the price of the Westfield purchase after Mr. Charles N. Stimpson finally refused to go on, and after you returned from Westfield?

Ans. I had no particular reason other than those given above; only the unpleasantness of going on together.

Int. 79. But although you were not going on together Mr. Chas. Stimpson, Mr. Fales, and Mr. Oaks had made this purchase of property at Westfield by authority of all parties concerned, including yourself. That being so, why did not you, for instance, at any time after your return from Westfield, come forward with any offer to pay for your proportion or share in that purchase?

Ans. I considered my offer to Mr. Fales sufficient.

Int. 80. What was your belief when you left Westfield as to Mr. Charles N. Stimpson's real intentions in regard to that property—I mean as to returning it to Loomis, Lewis & Co., giving it up to any other parties, or holding or working it himself?

(Objected to.)

Ans. My belief was that he did not intend to give it up or return it to Loomis, Lewis & Co. He could have returned it to us if he had chosen so to do.

Int. 81. Why so?

Ans. Because we had offered through Mr. Fales to take it—Mr. Lindsey and myself.

Int. 82. You say that the meeting on Monday evening after you returned from getting the note discounted, was either adjourned or dissolved. What do you understand by dissolved as distinguished from adjourned.

Ans. I understand that to dissolve a meeting would be to break it up; to adjourn would be to continue to a certain time.

Int. 83. How far was your store, in Dana, from the shop of Johnson, Stimpson & Co.?

Ans. Somewhere from ten to twenty rods, I should think.

308 Int. 84. You say you and Mr. Charles N. Stimpson managed the business of Johnson, Stimpson & Co., more particularly abroad; please state what the business abroad included, I mean in a general way.

Ans. We solicited orders for the concern about veneers, and we had a wareroom in New York, which we attended to part of the time, each of us.

Int. 85. Under whose charge, if under that of any particular member or members of the concern, would such a matter come as that of the making, continuance, or termination of the Wheeler contract?

Ans. Such a contract as that would be likely to come before the whole of us.

Int. 86. Did it, in fact, come before the whole of you? I mean the continuance of it, after you joined the firm, and the termination of it.

Ans. I think it did.

Int. 87. How far, if at all, did your duties or occupations at the store interfere with your paying usual and sufficient attention to business going on at Johnson, Stimpson & Co.'s establishment?

Ans. My store belonged to the company, Johnson, Stimpson & Co.

Int. 88. By Johnson, Stimpson & Co.'s establishment, I mean your leg factory. Answer question eighty-seven accordingly.

Ans. Not at all.

Int. 89. Do you mean that the business of the store was owned and carried on by Johnson, Stimpson & Co. through you and Mr. Lindsey?

Ans. Principally through us. We had clerks to assist. The business was owned by Johnson, Stimpson & Co.

GEO. T. JOHNSON.

Deposition of Joseph Fales.

SEPTEMBER 28, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. Joseph Fales; age, 46; residence, Troy, New York; occupation, builder.

Int. 2. Were you one of the parties who went to Westfield to purchase the manufactory of Messrs. Loomis, Lewis & Co., in September, 1859? and if yea, who went with you for that purpose?

Ans. Mr. Oaks went with me. I was one of the parties.

Int. 3. Did you attend a meeting of the proposed partners, or the parties who proposed to buy the Westfield concern, before
309 you went to Westfield? and if so, state as near as you recollect, who were present at that meeting, and what was done?

Ans. I don't recollect of any such meeting.

Int. 4. When were you notified that you were desired to go to Westfield for this purpose, and by whom?

Ans. On the day on which we went, by Mr. Warren Hale.

Int. 5. Before going to Westfield, did you know of any agreement as to the division of shares, or as to the method of carrying on the business at Westfield and Dana, or any other agreement relating to the management of the busineas at Westfield and Dana? If so, please state what those agreements were.

Ans. I did not know of any.

Int. 6. Did you have any talk with Mr. Stimpson, before going to Westfield, in relation to such agreements? and if so, please state what was said.

Ans. I don't recollect having any such talk.

Int. 7. Were you present at a meeting with Mr. Warren Hale, Mr. Allen Goodman, Mr. C. N. Stimpson, and others, shortly before going to Westfield, when Mr. Wm. N. Oaks was sent for? and if so, please state what occurred at that meeting, and what agreements, if any, were then made between the parties present.

Ans. I think I recollect one evening of being in Mr. Hale's office, and they sent for Mr. Oaks; it was upon this matter of the purchase of the Westfield property. I do not recollect that there was any agreements entered into, or conclusions arrived at, at that time.

Int. 8. Do you recollect whether any agreement was made, at that time, as to the names, or name, of the proposed firm or firms, or whether any thing was said upon this matter? If so, please state as fully as possible.

Ans. I don't recollect as there was anything said about it.

Int. 9. How did you go to Westfield, and who went with you? Please state fully and particularly.

Ans. I went with Mr. Oaks, in a horse and buggy driven by him, to Northampton; from thence, by railroad, to Westfield; we met Mr. Stimpson in Northampton, and he accompanied us to Westfield.

Int. 10. At the meeting in Mr. Hale's office, before you went to Westfield, was there any agreement made as to the division of shares between the proposed partners? If so, please state what it was.

Ans. I do not recollect of any.

Int. 11. Did you stay over night at Northampton? and if so, where? and where did Mr. Stimpson and Mr. Oaks stay, if you know?

Ans. I did; I stayed at a public house; Mr. Stimpson stopped at the same house. Mr. Oaks stopped with some friend or connexion of his.

310 Int. 12. At what time was this meeting to which you have testified—at what time of the day, I mean?

Ans. I think it was in the evening; I don't know that it was a formal meeting; I think it was a happening together.

Int. 13. Was that meeting adjourned to the next morning?

Ans. I do not recollect it.

Int. 14. Did you start the next morning, or the morning after this meeting, with Mr. Oaks from Dana for Westfield? If not, when did you start, and what time in the day was it?

Ans. I did not start the next morning—it may have been the next day after the meeting. We started in the afternoon.

Int. 15. Did you have any conversation with Mr. Stimpson, or Mr. Oaks, on your way to Westfield, about the proposed purchase? and if so, please state what they said; give the substance, if you cannot recollect the words used.

Ans. It was arranged, upon arriving at Westfield, or while going, that Mr. Oaks and myself should introduce the subject; we were to go over and see the parties; Mr. Stimpson was to remain at the hotel, near the depot. I don't recollect that the talk amounted to anything; I don't know exactly what it was.

Int. 16. Did Mr. Stimpson or Mr. Oaks mention any sum which they proposed to offer Loomis, Lewis & Co. to which you objected? If so, please state as fully as you recollect what was said about this.

Ans. They did. They proposed to offer a larger sum than I thought best, at the start. I think the sum they proposed was ten thousand dollars, to the best of my recollection, and I think I suggested six thousand. I don't recollect whether we made the offer first, or whether Mr. Loomis set his price upon it; I think Mr. Loomis raised from his first offer for the final consummation of the purchase.

Int. 17. Did you have any talk, on your way to Westfield, as to whether the purchase was desirable or not? If so, please state as fully as you recollect, what opinions Mr. Stimpson or Mr. Oaks expressed upon this subject.

Ans. I do not recollect now anything particular upon that subject being said.

Int. 18. What was your own opinion, at that time, upon the subject, and what, so far as you know, was the opinion of Stimpson and Oaks, or either of them?

Ans. Well, my own opinion—I wasn't so well acquainted with the business, and don't know that I had formed an opinion, but Mr. Stimpson and Mr. Oaks were anxious to make the purchase.

Int. 19. Please state, as near as you recollect, what terms you finally agreed upon with Loomis, Lewis & Co.

311 Ans. The sum paid entirely, I mean the amount to be paid entirely, for the property, I do not now recollect. We paid at the time two hundred dollars, (I paid it,) and were to make another payment in a week, I think, of a thousand dollars. We were to make payments from time to time, until the whole was paid. Took a bond for a deed; the deed was to be given after a certain amount had been paid. After completing the writings in full, we left Mr. Oaks in charge of the property, and to take an inventory of the personal property, manufactured, partly manufactured, and unmanufactured lumber, &c. Mr. Stimpson and myself returned to Dana.

Int. 20. How long were you at Westfield before the writings were signed?

Ans. Two or three days, I think—I don't recollect exactly.

Int. 21. Did Loomis, Lewis & Co. make objections to signing, after they agreed to sign? and if so, did Mr. Stimpson say anything to you about their machine being an infringement of the Hale & Goodman patent, and about using that fact in any way to bring them to terms? If so, please state what he said, or the substance of it, as fully and particularly as possible.

(Objected to.)

Ans. I think some of the members of the firm did object to signing it, delaying the consummation of the writings, and I think that Mr. Stimpson made the remark, at a time we were going from the office of Gillett, where the writings were made. Mr Stimpson said to me that there was no doubt that the machine was an infringement of Hale's patent; I don't remember that he said anything in regard to using this for benefiting the trade, or anything of that kind.

Int. 22. Had you seen and examined the machine before this?

Ans. I had.

Int. 23. Was any objection made on your part, or by either of you,

to signing these writings, and did either one of you refuse to sign them at first? and if so, what objection and who made it?

Ans. I dont recollect of any objections or hesitancy by either of us.

Int. 24. Mr. C. N. Stimpson testifies that they refused to take the writings unless we would sign them, and that rather than have the trade broken up he signed them with you and Mr. Oaks; please search your memory carefully, and state whether you recollect anything of this kind—state also which of you signed first, if you recollect.

(Objected to.)

Ans. I do not recollect anything of the kind. Mr. Stimpson signed first.

Int. 25. Mr. C. N. Stimpson testifies that during your ride from Northampton to Dana, Mr. Fales seemed to feel a little uneasy about the purchase, not understanding the business; he said we had
312 gone into a pretty big operation; suppose the folks don't take it off our hands when we get home. Please state what uneasiness or apprehension, if any, you expressed to Mr. Stimpson during this ride, and what he said about it, if anything.

(Objected to)

Ans. I don't recollect of expressing any uneasiness at all. We may have had such conversation, but I don't now recollect.

Int. 26. Please state what uneasiness or apprehension, if any, you felt at that time.

(Objected to.)

Ans. I don't recollect of any.

Int. 27. He also testifies that he told you that he thought the parties we bought of were sick of their bargain, and would take the property back again. Please state what you recollect of this, and whether you understood Mr. Stimpson at that time to be at all desirous of selling the property back again.

(Objected to.)

Ans. I do not recollect such conversation. I don't recollect anything of such conversation while going back to Dana.

Int. 28. Before you left Westfield did Mr. Stimpson say anything to you as to you and he taking the concern and going on alone? and if so, please state as fully as possible what he said.

(Objected to.)

Ans. I think the same night on which the bargain was concluded, after we got home to our hotel, we were talking about the purchase, and he seemed well pleased with the purchase; said that if he and I could take the concern alone he would willingly pay the amount of his bonds to Mr. Hale.

Int. 29. Did you attend a meeting at Athol the day after you got back to Dana? If so, please state the object of that meeting and what was done. State as fully as you recollect.

Ans. I think I did attend a meeting at Athol on the next day. The object of the meeting was the purpose of forming a stock company, but we did not form any company at that time. We examined the statutes in regard to stock companies and decided to give it up, that is, the stock company. Adjourned without accomplishing anything.

Int. 30. Was there any voting, or records, or officers elected at this meeting?

Ans. I no not recollect as there was. I should think not.

Int. 31. Do you recollect a vote to ascertain what the names of the concerns should be, and Mr. George T. Johnsons's objecting to their having two names, and being voted down. If so, please state fully what you recollect upon this subject.

313 Ans. I do not recollect anything of the kind.

Int. 32. When and where was the next meeting, if you recollect, and who were present?

Ans. The next meeting was to Warren Hale & Co.'s office. Mr. Hale was present, Mr. Johnson, Mr. Lindsey, and Mr. Oaks. No, Mr. Oaks could not have been present at that meeting; he was in Westfield at that time. Mr. C. N. Stimpson was there.

Int. 33. What organization, if any, took place at that meeting on Monday; who presided, if anybody; who was clerk, if anybody, and were any records made?

Ans. I think I acted as chairman. Johnson was secretary and kept the minutes.

Int. 34. Was there any chairman, secretary, voting, or minutes at any previous meeting at which you were present?

Ans. I do not recollect of any.

Int. 35. Was anything said at that meeting on Monday by way of objection to Mr. Lindsay's coming into the concern? If so, what and by whom?

Ans. I do not recollect of any objections being made by anybody.

Int. 36. Who was Mr. Lindsay?

Ans. Mr. Lindsay was a resident of the town of Dana at that time, formerly a merchant, and after, a partner in the firm of Johnson, Stimpson & Co., and at that time one of the selectmen of the town.

Int. 37. What sort of a man was he as to intelligence, character, business capacity, and standing in his town?

Ans. His character was good, as far as my knowledge extends, and his business capacity was not excelled by any one in those parts. He was a man of intelligence and good standing.

Int. 38. Who invited him to be present at this meeting, do you know?

Ans. I invited him. Whether any other one did, or not, I do not know.

Int. 39. Was any proposal made at this meeting to have separate names for each concern? and if so, who proposed it? Was it voted upon? With what result? and what was the final determination of this meeting as to the name, or names?

Ans. I think there was such a proposition from Mr. C. N. Stimpson. I think it was decided against the proposition by vote. The name finally decided upon was Warren Hale & Co.

Int. 40. What name did you vote for, if you recollect? and state, if you know. who else voted for the same name.

Ans. I voted for Johnson, Stimpson & Co. There were more votes for that name; I think C. N. Stimpson voted for the same.

314 Int. 41. Did any one say at that meeting that it had been before agreed to have two names, one at each place, or anything to that effect? or did you understand, before or after that meeting, or do you understand now, that such an agreement had been made?

Ans. I do not think there was anything of that kind stated at the meeting, in regard to an agreement of that kind, nor that there ever was such an agreement; there never was such an agreement ever made; I do not understand that there was; I think I have heard the idea suggested, and talked of, two names, one for each.

Int. 42. Was anything said or done at that meeting, or at any previous meeting which you attended, which led you to infer that any other of the proposed partners ever understood that an agreement of that kind was made?

Ans. No.

Int. 43. What was said or done in that meeting, if anything, in regard to Mr. Lindsay's joining the concern and the share that he should have?

Ans. I don't recollect of anything.

Int. 44. Did all persons present take part in the voting?

Ans. That I couldn't say, whether there were more present than voted or not. I don't know of anybody there who didn't vote, unless Mr. Hale's son was present, and I don t know whether he was or not. He was a lad about sixteen.

Int. 45. Was there a note made at this meeting? If so, for what amount, who signed and indorsed it, as near as you can recollect, and for what purpose was it made?

Ans. There was a note made, signed by Warren Hale & Co., and indorsed by Fales & Stimpson, Stimpson and myself, perhaps, or it was signed by Stimpson and myself and indorsed by Warren Hale & Co. I won't be positive which. The amount of the note was one thousand dollars. The note was made for the purpose of obtaining the money to make payment on the Westfield property.

Int. 46. Did Mr. Charles N. Stimpson make any objection to signing or indorsing this note, on the ground of the name adopted, or of Lindsay's admission, or for any other reason?

(Objected to.)

Ans. Not that I recollect of.

Int. 47. How much doubt do you mean to imply by your last answer?

Ans. I have no recollections of any objections to signing it; I haven't expressed any doubt and have no doubt about it.

Int. 48. Was any objection to or protest against any of the proceedings at this meeting made by any one? and if so, by whom?

315 Ans. Not any that I recollect of.

Int. 49. Was this meeting adjourned? and if so, why, and to what time?

Ans. I am not exactly clear upon that, but to the best of my recollection it was adjourned till evening, this being in the morning; there was a difference of opinion in the premises, and I think Mr. Stimpson left and Mr. Lindsay left and went away; I do not know but what it

was adjourned before Mr. Stimpson left; I don't know but what he suggested he was going out of town; he went away anyway.

Int. 50. Was anything suggested as to the nesessity of Mr. Johnson's going to Athol to attend a meeting of the stockholders in the Millers' River Bank, and to get the note discounted?

Ans. Mr. Johnson did go and took the note and got it discounted; I don't recollect of anything being said, or what was said.

Int. 51. Did you meet that evening, or some of you? and if so, who were absent?

Ans. I think we did meet; Mr. C. N. Stimpson was absent.

Int. 52. What was done at this meeting, if anything?

Ans. I do not recollect of anything being done.

Int. 53. Why was nothing done, if you know the reason?

Ans. The expectation was that Mr. Stimpson was to be present; he went out of town that day with his family, and was expected back, but he did not come back.

Int. 54. Did you meet again next morning, and if so, was Mr. Stimpson present?

Ans. I think we did, but Mr. Stimpson was not present.

Int. 55. Did Mr. Stimpson get to town that morning, and did you go to see him at his house, or did he send for you?

Ans. Mr. Stimpson came to town that morning; I went in the afternoon to his house; do not think that he sent for me.

Int. 56. Did he get back before the meeting or afterwards?

Ans. I think we were together when he came back; I don't think it was much of a meeting. We were together in Mr. Hale's office, when Mr. Stimpson drove by.

Int. 57. Please state as fully and as much in detail as possible what conversation you and Mr. Chas. N. Stimpson had when you went to his house that afternoon, and whether you were there at any other time that day, I mean Tuesday, the day after the meeting at Mr. Hale's office, where you were chairman.

Ans. I went over to see Mr. Stimpson; I found him in the house sick, as he said; the particulars and details of the conversation
316 I couldn't relate; all that it amounted to, and as I understood it, was that he would be able in the morning to go to Westfield with me to make the payment which became due the next day or the day after; we so arranged and I left the house. I think I did not see him again until I met him the next morning at Greenwich village, where we took the stage for Belchertown, on our way to Westfield; I think I was at his house only once that day.

Int. 58. Did Mr. Stimpson then ask you to go and see the other partners and made any proposals to them from him, and did you see them, or any of them, and make this proposal?

Ans. I don't think there was any such conversation; I don't recollect anything of the kind.

Int. 59 Did he tell you then, or any other time, that he wanted to leave the concern entirely and as easily as possible, and that he would give up the property to the proposed partners if they would pay his expenses down to Westfield, or anything to that effect?

(Objected to.)

Ans. I don't think he did.

Int. 60. Before you went to Westfield to make this payment, did you understand or have any idea that Mr. Charles N. Stimpson was desirous of giving up his interest in the Westfield property to the other proposed partners, or was willing to do so?

(Objected to.)

Ans. No.

Adjourned.

JANUARY 20, 1865.

Int. 61. The day before you went to Westfield the second time, did Mr. Charles N Stimpson make any objection to you to taking Mr. Lindsay into the concern? If not, did he at any other time? and if so, what were the grounds of his objection?

Ans. I do not recollect the precise time, but I think Mr. Stimpson did make objections. What the objections were I do not now recollect.

Int. 62. Did Mr. Stimpson propose, the day before you went to Westfield, or at any other time, that you should go to Westfield and sell the property back to the parties you had bought of, provided Mr Oaks would consent to that course, and make what you could on it; and if you could make any profit, to do so, and if not, let them have it at cost?

(Objected to as leading.)

Ans. I don't think he did.

Int. 63. Did he propose at that time, or any other time, that
317 you and he should take his brother Warren with you, and put his name in your place, so that you should be relieved of any anxiety in the matter? And if so, did you agree to that arrangement?

(Objected to as leading.)

Ans. There was such an arrangement after I returned from Troy, but not at that time, before we went to Westfield.

Int. 64. Mr. Warren Stimpson testifies that you and his brother, Charles N. Stimpson, came to him soon after the afternoon after they met in Mr. Hale's office, and wanted him to go to Westfield the next morning to take your place in the trade, in case you and Charles N. Stimpson couldn't make arrangements with Mr. Oaks to release Charles N. Stimpson; that he agreed to go, and that you were to meet him and his brother at Greenwich village the next morning. State how much of this is correct.

Ans. I don't recollect anything of the kind.

Int. 65. Did you meet Charles N. Stimpson and his brother on your way to Westfield the second time? and if so, state what day of the week it was, and where you met them.

Ans. I think it was on Wednesday, at Greenwich village, that I met them.

Int. 66. Was Mr. Warren Stimpson present in pursuance of any previous arrangement between him, yourself, and others? If so, state what that arrangement was.

Ans. There was no arrangement between Mr. Warren Stimpson and myself, at any time, that I recollect of.

Int. 67. Did you meet any of the other proposed partners at Belchertown? and if so, whom?

Ans. I did; Mr. Silas F. Lindsay and George T. Johnson.

Int. 68. Did you have any conversation with Mr. Lindsay on this occasion, in reference to the Westfield purchase? If so, please state it as fully as you recollect.

Ans. I did have conversation with Mr. Lindsay in reference to the Westfield purchase, but whether before we arrived at Westfield, or after, I can't say; Mr. Lindsay stated to me that they, Lindsay and Johnson, were prepared to take Mr. Stimpson's interest in the purchase.

Int. 69. What was your purpose in going to Westfield the second time?

Ans. To make the payment due for the purchase in accordance with our agreement—the $1,000 payment.

Int. 70. Was this your only purpose, or had you some other intention, idea, or purpose in going to Westfield the second time? and if so, what?

Ans. No other.

Int. 71. Please state, as fully as you recollect, what passed
318 between yourself, Mr. Stimpson, and Mr. Oaks at Westfield in reference to Mr. Stimpson's retirement.

Ans. I think I stated to Mr. Stimpson that Mr. Lindsay and Johnson would take his interest if he wished to get out of it. Mr. Lindsay objected to letting them have it; I think he objected upon the ground that Mr. Oaks would not consent to it.

Int. 72. What was your opinion at that time as to Charles N. Stimpson's real intentions on this point, and what were the grounds of that opinion?

(Objected to.)

Ans. My opinion was, that his intention was to keep the property, as he had often stated that the purchase was a good one; that he had no fears for the purchase.

Int. 73. Did you have any conversation with Mr. Oaks alone, at Westfield, in relation to Stimpson's selling out his interest? If so, please state it.

Ans. I did. Mr. Oaks objected to Mr. Stimpson selling out. He preferred Mr. Stimpson should remain in, he being a friend of his; he said he was afraid that if Mr. Stimpson went out he shouldn't have anything like fair play; that Mr. Stimpson was friendly always to him, and that at one time he had made him a present of a melodeon.

Int. 74. Was the payment made? and if so, on what day of the week?

Ans. It was made, I think, on Thursday.

Int. 75. Did you ever tell Mr. Oaks that you should let that property fall back into the hands of Loomis, Lewis & Co., although you had the money to make the payment, and lose the $200 already paid, and that he would have to lose his portion of it?

(Objected to as leading.)

Ans. I did not.

Int. 76. What time of the day was it when you got to Westfield?

Ans. I think about noon.

Int. 77. What time of day did you leave, and who of the proposed partners left with you?

Ans. We left on Thursday about noon; Mr. Charles N. Stimpson and Mr. Oaks left with me.

Int. 78. Where did you go, and how far did they accompany you?

Ans. I went to Monson, and left them at Palmer; they went on in the cars, and I got out at Palmer.

Int. 79. Mr. Charles N. Stimpson testifies that you said to him at the depot that you were going to Monson, "and if you've decided fully, Mr. Stimpson, not to have anything more to do with this concern, I want you to tell Mr. Hale and the others to count me
319 out, as I have decided not to have anything to do with it unless you do." Did you ever send such a message or any message to the other partners, or any of them, by Mr. Stimpson, or by any one else?

Ans. Not to my recollection.

Int. 80. Where did Messrs. Stimpson and Oaks go, if you know, or if they told you, at the time?

Ans. I understood from them that they were going to Warren by the railroad, and from thence to Dana by way of Ware.

Int. 81. Did you and Mr. Stimpson and Mr. Oaks have any conversation on your way to Palmer in the cars with reference to completing the proposed arrangement? And if so, state what passed between you.

Ans. I do not recollect what our conversation was. I think about the time I left the cars Mr. Stimpson stated that he was going up to Dana to give up or get rid of his interest.

Int. 82. What arrangement did you finally make in regard to your interest in the Westfield purchase?

Ans. Mr. Stimpson paid me my expenses and a piano, and my name was stricken from all the papers.

Int. 83. When was this arrangement made? How long after your second visit to Westfield?

Ans. I think about a week after; it was within a fortnight, at any rate.

Adjourned to to-morrow at 10.

Cross-examination:

Cross-int. 1. Did you consult with Mr. Hale or either of the other parties who were interested in sending you to Westfield to make the purchase, after you left Westfield to go to Monson, and before you sold out your interest to the Stimpsons?

Ans. When we left Westfield I went in the cars with Mr. C. N. Stimpson and Oaks as far as Palmer. I left the cars at that place, and they went on to Warren in the cars. I do not recollect the particular conversation, but think we had conversation in general with regard to matters pertaining to the purchase. The next day, on my way to Troy, I met Mr. Warren Hale and Mr. George T. Johnson in

Springfield. I had a few moments' conversation with them, but precisely what it was I cannot now recollect. I think I told Mr. Hale that I should dispose of my interest in some shape or other, and also that I told him that Stimpson and Oaks had gone to Dana.

Cross-int. 2. What reply did Mr. Hale make to what you told him?

320 Ans. I do not recollect exactly, but think he made this remark during the conversation, that he should prosecute the infringement of his patent.

Cross-int. 3. Do you remember what reply he made when you told him you should dispose of your interest somehow?

Ans. I think I said to him that I would make an assignment of my interest to him if he desired, and he turned to Johnson and made this remark, "Johnson, what do you say?" Johnson made no reply. That's about all that was said.

Cross-int. 4. Did you tell Mr. Hale what Stimpson and Oaks were going to Dana for?

Ans. I do not recollect now that I did. I might have said that they were going up to make arrangements for the firm as intended.

Cross-int. 5. Did you know what Messrs. Hale and Johnson were at Springfield for, or where they were going?

Ans. I think I understood from them that they were going to New York.

Cross-int. 6. Did you see anything more of either Mr. Hale or Mr. Johnson, or either of the other parties, or communicate with them in any way in respect to the disposition you should make of your interest before you sold to the Stimpsons?

Ans. I think not

Cross-int. 7. You say, in answer to the eighty-first interrogatory, that you think that about the time you left the cars Mr. Stimpson stated that he was going up to Dana to get rid of his interest; did you have any further conversation with him? What reply did you make to him?

Ans. I don't recollect of any further conversation nor of any reply.

Cross-int. 8. How came he to make that remark?

Ans. I could not tell.

Cross int. 9. Do you know why Warren Stimpson went to Westfield with you and C. N. Stimpson?

Ans. I do not. It was by no arrangement of mine.

Cross-int. 10. How came Mr. Lindsay to go there?

Ans. I do not know; it was by no arrangement.

Cross-int. 11. After you sold out to Mr. Stimpson and Oaks, did you, during the fall or winter, have any communication or correspondence, or any negotiations of any kind, with Mr. Geo. T. Johnson, or Mr. Hale, in respect to any business arrangement with which Messrs. Stimpson and Oaks were to be connected?

Ans. None at all.

Cross-int. 12. Will you look at the letters, of which the following are copies, and state whether you wrote them?

321 TROY, *October* 25, '59.

Messrs. Stimpson, Oakes & Co.:

GENTS.: I received your letter and circular, with check enclosed, this morning, and I enclose in this your note, by return mail. I think you have a very nice circular. You say you will see me before long. I shall be happy to see you at any time when convenient to you. I have not heard anything from Mr. Hale since I was at Westfield. I received a line from George in answer to my letter which Mr. Warren Stimpson took to him. He did not say positive in regard to my suggestions, but thought he should not embark. I expected he would be home before this time, but does not get along yet, but expect him soon. He did not write a word what they were doing; when he comes I shall find out all about affairs. You spoke of sending the pianoforte this week. It will be very acceptable. The women folks are a little anxious to see the instrument Please drop a line when shipped, or come up on the same boat. I would like to see you first rate. I shall be happy to hear from you again, and hear that you still are prospering. And with much respect, I remain, as ever,

Yours truly, JOSEPH FALES, *Troy*.

Messrs. STIMPSON, OAKES & Co., *Westfield*.

TROY, *November 2d*, 1859.

Messrs. Stimpson, Oakes & Co.:

GENTS.: I received yours of Oct. 31st this morning; have seen Mr. E. P. Jones, Steinway's agent, and got his permit, which I enclose to you by return mail. You did not say whether you received your note or not, but I suppose you have, as I enclosed it in a letter to you. The stool has not yet arrived, as I have learned. We are having very fine weather now. Write again, George has been here; will be in Dana at election next week. He has not decided what he will do. He is to be here again next week.

Yours, with much respect,

JOSEPH FALES.

TROY, *December 3d*, 1859.

Messrs. Stimpson, Oaks & Co.:

GENTS.: I received yours of Nov. 28th, inquiring in regard to receipt of piano and stool; I had written you in regard to it, acknowledging the receipt of them satisfactory. G. T. John-
322 son is in New York. I received a letter from him this morning, saying that his opinion was the purchase could be better made next spring than now. He, G. T. J., will be in Dana next week. I enclose to you your due-bill to me for piano and stool. I would ask of you to send me a bill of sale of both piano and stool receipted, making the prices as you may think best—say piano $350 or $400 as best. I think, perhaps, I might make sale for some pianos, and this receipt will be useful in such a case. So make the price as you think will be

for your interest; in that event I do not think we should lose anything by waiting until spring; but perhaps you have some policy marked out. If you should be in Dana soon you then talk to Johnson on the subject. Write me again in the matter when you send the receipt for piano and stool.

I remain, as ever, with much respect, yours,

JOSEPH FALES.

TROY, *Dec.* 13, 1859.

Messrs. Stimpson, Oakes & Co.:

GENTS.: I received yours with receipt enclosed, all right; I expected to hear from G. T. J. before this, but have not; he was to write me on his arrival at North Dana in regard to matters, and what he thought best to be done in the premises. Mr. Stimpson, if you have been to Dana, perhaps you are somewhat posted in the matter; I have not heard a word from Dana for over a month; perhaps they are displeased, so I cannot have an interest there, perhaps, if I should want. I am expecting a letter from George T. Johnson every mail, which may contain some news. Write again soon.

Truly yours, in haste,

JOSEPH FALES.

Ans. I think those are correct—that I wrote them.

Cross-int. 13. What was it that you referred to in those letters, in connexion with Mr. Johnson?

Ans. I think that there were hopes by Mr. Hale, Mr. Johnson, and perhaps Mr. Stimpson, of making the North Dana property, owned by Hale & Co., and the Stimpson & Oaks property at Westfield, one concern; but for myself, having got out of it, I had no intention of being in any way connected with it.

Cross-int. 14. In the letter of December 3d, you speak of having received a letter from G. T. Johnson, saying that his opinion was the purchase could be better made next spring than now, what purchase do you understand him to refer to?

323 Ans. I cannot now say; my first impression was, when the interrogatory was being made, that it was the Westfield property, but I cannot positively state now.

Cross-int. 15. In your letter of December 13th, you say as follows: "I have not heard a word from Dana for over a month; perhaps they are displeased, so I cannot have an interest there, perhaps, if I should want." What did you refer to by this?

Ans. I think Mr. Stimpson suggested to me that I should take an interest in the North Dana property; I will not be positive, but if so, I merely answered his letter.

Cross-int. 16. In your letter of October 25, you say as follows: "I received a line from George in answer to my letter which Mr. Warren Stimpson took to him; he did not say positive in regard to my suggestions, but thought he should not embark." Does this refer to George T. Johnson? and if so, what were the suggestions that you speak of?

Ans. It does refer to George T. Johnson, and I think the suggestions were with regard to his taking an interest in the North Dana property.

JOSEPH FALES.

Deposition of Allen Goodman.

SEPT. 13, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Allen Goodman; age, 52; residence, Dana, Mass.; occupation, practioner of medicine.

Int. 2. What was your occupation in the early part of 1844, and with whom were you at work?

Ans. I was a mechanic, at work with Warren Hale.

Int. 3. What was Mr. Hale then making?

Ans. Piano desks, or frames to set the music against.

Int. 4. Did you and he go to Boston about that time to get other work? and if so, what job did he, or you and he together, get?

Ans. Not at that time, but later in the season; I should think it was in May or June; he took a job (I didn't take it myself, but he asked my advice about it) to make eight sets of piano legs from Lemuel Gilbert.

Int. 5. What kind of legs were those?

324 Ans. The ogee legs, four-square.

Int. 6. Was their outline regular or irregular, and was their surface plain or curved, and were they alike or unlike, on all sides?

Ans. Irregular, their surfaces curved, and nearly alike, not quite, on all sides.

Int. 7. How did you make the first of these eight sets that you made?

Ans. By a machine, on the same principle as "Exhibit 1, Hale & Goodman," only we had no dial to turn the leg.

Int. 8. Did you, or you and Mr. Hale, attempt to make these legs in any way; and if yea, how, before using that machine?

Ans. We did; we built us a jigger saw in as good shape as we could, and bought us a saw such as they use in Boston, and made some saws, and put up some blocks, glued them up, and made our patterns, and cut the blocks to the length of a leg, took our patterns and marked the blocks out to saw; I sawed some as accurate as I could do it; we found we couldn't saw them perfect, and I tried several experiments on fitting saws, and we got an old experienced hand that had used saws a great deal to help us in fitting the saws up; we could not succeed in getting saws that would saw perfect, and had to fit them by hand to lay the veneer; I did not fit but two or three squares for the veneer.

Int. 9. How long did it take to fit those two or three squares for the veneer?

Ans. It took me half a day to fit the first square; the other two didn't take quite so long.

Int. 10. What was the common way then in use for making piano legs?

Ans. It was to glue up the block out of plank or boards properly seasoned, long enough to make a leg; they then sawed them out as near perfect as they could; I never saw any fitted, but I saw them after they were fitted; they told me that was the common way to fit them after sawing for the veneer; they fitted them with planes, files, and chisels for the veneer.

Int. 11. When was this machine, mentioned in the seventh answer, begun, and when was it finished, as nearly as you now recollect?

Ans. It was begun in July and finished in August, 1844.

Int. 12. Had you ever, before that time, seen or heard of any machine for making piano legs? If so, what, and what kind of legs would it make?

Ans. I never had seen or heard of any, at that time, for that purpose.

Int. 13. Who got up this machine for making legs?

Ans. I and Mr. Hale got it up.

Int. 14. How long after this machine was commenced before it was set to work, as near as you can recollect?

Ans. After we really commenced work on it it was about three weeks.

Int. 15. Please state how you fix the date when it was finished and you began to work with it.

325 Ans. I can't give the exact date; we entered a caveat soon after trying the machine, as soon as we were satisfied that it would work.

Int. 16. Please state how it worked, and whether or not the legs ordered by Gilbert were made upon it.

Ans. It worked well, and the legs ordered by Gilbert were made on it.

Int. 17. While the machine was building, did you and Mr Hale have any talk as to the means for holding and turning the leg? If yea, what was said, in substance?

Ans. We did have talk about it; we talked of putting in a dial, but on account of the delay it was going to make in finishing the machine and finishing the order from Gilbert, we concluded we wouldn't put it on then; we had made up our minds to get the machine patented, and thought we could put it in our model just as well, in order to secure the patent.

Int. 18. Were you delayed in any way in finishing the machine? and if so, how?

Ans. We were delayed in getting our work done and we had to do the work ourselves.

Int. 19. What were the facilities at that time in Dana for getting machine work done?

Ans. They were not very good; we had to go some ten miles to the nearest machine shop.

Int. 20. If you made, at that machine shop any part of this machine, state what part it was.

Ans. I made or turned the cutting cylinder at Downing's machine shop in Enfield.

Int. 21. Did you apply to Mr. Rufus Powers to get some of the iron work made? and if so, with what success?

Ans. I applied to Rufus Powers to get some gear; I think I got one piece, or a rack, of him; I also tried to get him to turn an arbor, or cutting cylinder, or let me do it; he said he was so drove he couldn't assist me, and was short of water.

Int. 22. How long would it have taken you, at that time, to have had an index plate made?

Ans. I should think two weeks.

Int. 23. What was the reason of your hurry to get the legs made for Gilbert?

Ans. Our time to do it in, I think, was nearly expired; he wrote Mr. Hale once to hurry him up; I don't know but the time had expired in fact.

Int. 24. Who cut those legs on that machine?

326 Ans. Lorenzo Hale, with my assistance.

Int. 25. How was the leg held and turned?

Ans. It was held by being placed in the centre of the carriage, and by having two spurs, or dogs, put in the cross-piece of the carriage, and by driving up the leg with a screw from the other end of the carriage against the spurs; we loosened the screw at the foot of the carriage, drew the leg clear from the dogs and turned it one-fourth round, and placed it back by lines drawn across the top of the leg so as to square it, and squared it by the cross-piece of the carriage.

Int. 26. What was required to be done to these legs, if anything, after they were cut in this machine, to fit them for veneering?

Ans. Not anything.

Int. 27. When was the model made which was afterwards sent to the Patent Office?

Ans. It was made, or commenced on, soon after we finished this job of Gilbert's; I think it was commenced in September; I think it was finished in December, except staining or something like that.

Adjourned to the 14th, at 10 a. m.

Int. 28. Look at the drawings of the reissue patent, and state whether or not they correctly represent this model?

Ans. They do.

Int. 29. How long before the application for a patent was the model finished?

Ans. Some months.

Int. 30. What was the cause of the delay in the application for a patent?

Ans. I am unable to tell the cause.

Int. 31. Did you and Mr. Hale have any difference in reference to our respective shares in the patent right? and if so, how far did difference affect, if in any way, your application for a patent?

Ans. We did have some difference; some time before we made the application the model was finished, and he was coming to Boston to bring some work; I expected he was going to bring the model and make application for a patent; I saw him when he started, and I ran and overtook him, and asked him if he wasn't going to carry the model; he said "No." I never ascertained the reason why, for I was very anxious to have the application made.

Int. 32. Did you sell out your interest in the invention before the patent was applied for? and if so, to whom?

Ans. I did, to Jonathan E. Stone.

Int. 33. How long was the machine first built used?

Ans. I should think not far from a year.

327 Int. 34. How many sets per week could this machine cut?

Ans. About ten, I should think.

Int. 35. How many were, in fact, cut upon it per week?

Ans. I could not tell exactly. Some days seven legs, and some days we cut eight of the square legs.

Int. 36. When was the second machine made?

Ans. I should think not far from one year after the first. I've no means of giving the exact date.

Int. 37. How did this machine differ from the first one?

Ans. In this respect: instead of the perpendicular frame to hold the cylinder cutter, the frame was supported on the end of the machine by supports fastened on top of the machine, and attached to one end of the frame. The dial-plate was placed in the carriage to turn the leg, to give the equal number of squares desired.

Int. 38. What kind of dial-plate was used, and how did it differ from that shown in the patent, if at all?

Ans. A cast iron dial-plate. It differed from that shown in the patent only in material.

Int. 39. What was the reason for the change in the arrangement of the frame of the cylinder cutter?

Ans. I don't know of any reason except it was cheapness in construction. I did not have any interest in the patent at that time.

Int. 40. Do you know when the next machine was built?

Ans. I knew at the time it was built; can't give the date. I should think it might be some three years from the first.

Int. 41. Do you know where it was intended to be used, and to whom it was, in fact, sold?

Ans. I heard Mr. Hale say that he was intending to carry it to England, or send it there. I think I bought the machine.

Int. 42. What did you do with it?

Ans. I manufactured legs with it.

Int. 43. Did you sell it, and if so, to whom?

Ans. I sold it to Hammond Doane.

Int. 44. How did this machine differ from the second?

Ans. There was no difference.

Int. 45. Did you ever see a machine which was built and used by an infringer in New York? If so, how was it made?

(Objected to.)

Ans. I saw one in New York. It was built like the last machine spoken of, except raising the cylinder cutter by a lever at-
328 tached to the centre of the swing frame, and with stationary guides instead of rolls, of the same shape as the rolls.

Int. 46. Were you interested in the patent at that time?

Ans. I think I was. I was.

Int. 49. What was done by the owners of the patent to stop the use of that machine, and with what success?

Ans. There was an agreement made with Mr. Hale, by the owners of the patent, to prosecute Mr. Brooks, the one who owned the machine.

Int. 48. How were the blocks prepared to be planed in the first machine?

Ans. They were sawed out in proper shape.

Int. 49. How are they prepared to be planed in the machine you now use?

Ans. In a turning-lathe.

Int. 50. How much nearer the shape of the completed leg are they now turned than they were sawed to be planed by the first machine?

Ans. Not any nearer, if they took particular pains in sawing up to the mark.

Int. 51. How much practical experience had you in planing piano-forte legs in those machines?

Ans. Some of the time I've worked at it for several months, all of the time, pretty much, every day except Sundays.

Int. 52. How long, in your judgment, will it take an ordinarily good mechanic to learn to plane legs on the Dana machine?

Ans. I can learn him so that he can operate the machine in one hour's time, and make a perfect leg.

Int. 53. How long, in your judgment, will it take an ordinarily skilful mechanic to become a practical workman, so that he can plane legs by the day upon the Dana machine?

Ans. If he is used to tools, grinding chisels and edge tools, I should say in a week's time.

Int. 54. How long will it take a man of ordinary quickness to learn to work the two handles for driving the carriage and elevating and depressing the cutters on the Dana machine?

Ans. I've seen a man take the machine, and the first time running the block through, he made a perfect face. It would take not over two minutes to do it. The motion is very quickly learned.

Int. 55. Who was this man, and what was his trade?

Ans. His name was Cobb, a blacksmith.

Int. 56. Did you see him plane a leg? If so, how long did it take him, how well was the work done, and how many blocks did he spoil, if any, before he made a perfect leg?

329 Ans. I saw him cut several squares on a leg, and they were cut perfect. It was the first one he ever tried. He spoiled no blocks. I didn't have the time in my hand, but I should judge it took him not over a minute a face after the first face he cut.

Int. 57. Mr. Oaks and Mr. C. N. Stimpson tesify that, in their judgment, it takes a man six months to become a practical workman upon the Dana machine. Are they correct?

(Objected to.)

Ans. If you give them all the patterns and fixtures, and explain the uses and changing the patterns, centres, &c., I can learn a practical workman so he can make all the patterns in one week's time.

Int. 58. What difficulty, if any, did you have in learning to use the Dana machine?

Ans. Not any.

Int. 59. Who cut the first face that was planed upon the first machine, and how was the work done?

Ans. I cut it; it was well done.

Int. 60. Shortly after Stimpson, Oaks & Co. began working at Westfield, and how soon after, did they commence negotiations with you, and what were those negotiations?

Ans. Soon after they commenced work, I think, I received a line from them stating something about the prices of piano legs, and wished to come into some arrangement not to undersell. I couldn't be certain whether I saw them first, or they wrote me a line. They wished me to talk with Mr. Hale, and see if we couldn't make some arrangement so as to keep the prices up, and share equally in the profits. Mr. Oaks, and, I think, Charles N. Stimpson were about making arrangement with an agent to sell the instruments. They stated to me that they could sell all we both would be likely to have for sale, and if we could bring around this arrangement it would be better for both companies. I talked with Mr. Hale, he consented, and we went to Greenfield and made the arrangement.

Int. 61. When was this arrangement made, and was it reduced to writing?

Ans. I can't give the date; in the spring, I should think, after the extension of the patent, the spring of 1860. It was reduced to writing.

Int. 62. Was there any verbal arrangement relating to the purchase of a machine owned by Lyman Wheeler, made about this time? and if so, what was it?

Ans. None to my knowledge.

Int. 63. Was any verbal arrangement made about that time as to their furnishing money or musical instruments for the purchase of such machine? and if so, what was it?

330 Ans. Stimpson or Oaks, I think, said if we did purchase, they would give us a piano, which, I think, they said was at Warwick. We thought they might give more than that. They said they would give us a melodeon or pay us one hundred dollars in money, if we would let them have the machine. They said they

didn't care anything about the machine; we might have our choice; that that was all they would give for the machine.

Int. 64. What was the object of purchasing this machine of Wheeler, as then talked over between you, Mr. Hale, and Stimpson, Oaks & Co.?

Ans. We did not wish to have him in the market.

Int. 65. Was anything said between you and Mr. Hale about this time as to letting Stimpson, Oaks & Co. have this machine?

(Objected to.)

Ans. There was on our return home. We thought they had rather laid a plan to get hold of this machine. I think that we said this, that we shouldn't let them have the machine.

Int. 66. About the time of this agreement of the spring of 1860, and the negotiations which led to it, did you and Mr. Hale have any talk about getting a reissue of your patent, and about whether the Oaks machine infringed or not?

Ans. We did. We were satisfied that it was an infringement, and I talked with Mr. Hale about it frequently, and wished to apply for a reissue. We had been laying out considerable, and Mr. Hale felt as though he didn't want to spend any more at the present time, and it was neglected.

Int. 67. Read the thirty-fifth interrogatory and answer of Mr. Lyman Wheeler, and state what you reccollect of the conversation there mentioned.

Ans. I recollect giving him an invitation to go into company with me. I then had a right in the Hale & Goodman machine. I recollect about his explaining a machine after the principle of the Springfield machine. In regard to the second carriage that he speaks of, I spoke of having a slide with a lever attached to it, the first carriage to be attached to this slide and run in grooves in the table. I might have said I didn't think it was any infringement, but I don't recollect that talk. The idea I got about the machine from Wheeler was that there was a cutter standing very much like that in model "Stimpson No. 2." He said, have a carriage run on the table, and press it up to the cutter by hand. I suggested to have a slot cut through this table, and a slide put in to run in the slot, to be moved back and forth by a rack and pinion. This lever or handle being attached to one end of the carriage, and the carriage being pivoted at the other end to the slide, it could be moved to and from the cutter by moving the lever by hand. I don't recollect anything more.

Int. 68. Please read the description of the machine in your
331 last answer, and state how the machine there meant to be described by you differs, if at all, from the Springfield machine, so called.

Ans. The principle is the same.

Int. 69. When you had this talk about the machine with Wheeler, did you own any part of the Hale & Goodman patent?

Ans. I think I did.

Int. 70. When did you sell your interest in that patent to Hammond Doane?

Ans. The fourth of August, 1852.

Int. 71. Do you recollect when you had this talk with Wheeler?

Ans. In the spring of 1853, I think, but am not fully satisfied.

Int. 72. Please read the thirty-seventh answer of Wheeler, and correct it, clause by clause, according to your recollection.

(Objected to.)

Ans. We made a contract with Stimpson & Doane; I can't say who brought it about; I thought he had as much to do with it as I had; the first I heard about their wanting to let this job of work was Mr. Wm. Stimpson said there was a chance for me of a good job, and he should want to let them have it that would do it the cheapest; he said that I and Mr. Wheeler might do well in taking the job; he said they had got more orders than they could do, and he should be obliged to let some one have it out of the village unless we chose to take the job; he spoke of David Allen, of Greenwich village, as being one to take the job, or that he thought would take it, and said now was our chance; I think then I informed Mr. Wheeler of what had been said, and I saw, I think, Mr. Doane next; he told me he'd get a job for me and Mr. Wheeler if we wanted it, and thought we had the conveniences to do it, and that we had better take it; he told me he would give me a fair price for doing it; I then went to Mr. Wheeler and informed him, and we made figures upon it, I being acquainted with the business, and concluded what we could do it for; I think it laid some days before we decided to take it. (Clause commencing "He said that they heard," and ending "put a stop to it," here read to deponent.) I don't recollect that talk, and am satisfied that I did not say that they had heard that we were going to make legs with a different machine; I never said that. (Clause beginning "And if we wouldn't," and ending "on our own account," here read to deponent) There was something such talk as this, that is, I recollect expressing this, that it would be cash down, and they had to wait a long time for their pay, and I'd rather work for smaller profit than wait for the pay. (Clause read again.) I don't appear to recollect that. (Clause commencing "I asked him," and ending "the making of the village," read to the deponent.) I recollect
332 saying many times that this business was the making of the village, but this talk I don't recollect; I think that could not have been said, or I should have had some recollection of it. (Clause beginning "I said to him to see them again," and ending "if it isn't too high," read to deponent.) Some of it I can recollect—a little there—about my advising him to see Doane & Stimpson; I can't bring any other part of this to my recollection, and I feel confident that if I had said part of it I must have recollected it. (Clause commencing "We then talked it over between us," and ending "injury to them," read to deponent.) I think part of that was in the first talk we had, that about $2 50 a set; a great part of it I don't recollect, and can't understand; there's ten times the talk in that than there ever was making the whole bargain. (Clause beginning "After that he said he had," to "the best way we could do," read to depo-

nent.) Yes, I recollect about concluding we could do them for $2 25 a set.

(Adjourned to 3 p. m.)

Int. 73. Did you sell out your interest in this contract with Stimpson & Doane? How long had it to run when you sold it, and what profit did you make on the sale?

Ans. I did; it had, I should think, about five years to run at that time; I calculate that I received about $100 profit.

Int. 74. Did you, or did Mr. Wheeler, in your knowledge, ever threaten that you would make a machine for planing legs which would not infringe the Hale & Goodman patent, and would make legs on your own account unless Stimpson & Doane gave you this contract? or did you, or either of you, make any such threat at all?

(Objected to.)

Ans. No, sir.

Int. 75. Did you say to Wheeler, or any one else, that a machine like "Stimpson's No. 2, H. F. S.," did not infringe the Hale & Goodman patent?

(Objected to.)

Ans. No, sir.

Int. 76. Who first proposed the purchase or sale of Wheeler's machine and water privilege, Mr. Wheeler or Hale & Goodman?

Ans. Mr. Wheeler.

Int. 77. Wheeler testifies, in answer to the fifty-sixth interrogatory, that, pending the negotiations for this sale, he told you and Mr. Hale that unless you would agree to leave the machine in his hands until he could finish such stock as he had on hand, he would be under the necessity of building something to do this work on; is this true?

(Objected to.)

333 Ans. It is not; not in my presence.

Int. 78. Did Wheeler tell you, or say in your hearing, that he would build a machine cheaper and better for his purposes than the one you were about to buy, and afterwards bought?

(Objected to.)

Ans. He said he could build a machine for cutting cone legs that he could cut with faster than he could on our machine; that it would be a cheap and simple machine.

Int. 79. Mr. Wheeler testifies, in answer to the seventy-fourth interrogatory, that you and he talked together about the Oaks machine being an infringement of the Dana machine, and that you said you thought it was not an infringement, and gave as a reason that the two machines raised and lowered the cutters in a different manner; is this true?

(Objected to.)

Ans. I've no recollection of any conversation with him about it.

Int. 80. Mr. Wm. N. Oaks testifies that you advised him to go to Westfield; please state, as nearly as you can recollect, just what talk you had with him in reference to that matter.

Ans. He talked with me about building a machine, and explained

to me something of the principle, so that I formed an idea of the principles of the machine. (Question read again.) He asked me if I thought that would infringe the patent; I said I didn't know as it would; he spoke about the offer that Mr. Bosworth made him, and said that Mr. Johnson hadn't used him just right, and spoke of what had been done and said to him by Johnson; I told him if that was so, I didn't know as I could blame him for going to Westfield; that on my part I had rather he would stay at Dana; I don't appear to recollect any further conversation.

Int. 81. Mr. Oaks testifies that he thinks that Mr. C. N. Stimson told you at Oaks's house that he would go on with the proposed partnership for carrying on the Dana and Westfield concerns together, if Mr. Lindsay would step out; please state what conversation you had with Mr. Stimpson in reference to Mr. Lindsay's retiring, and where it was had.

Ans. Right after the meeting we had to form the company; Mr. Stimpson said that he didn't know that Silas F. Lindsay was coming in; he said he didn't think much of it; that he didn't know he was coming in; I told him I did not know it before; he spoke as though he didn't care about going along with the company, and made that an objection; I told him I thought he had better go along; that if Lindsay was the objection. I could get that matter arranged, for I had heard him say he didn't care much about going in; he said then they had shoved him out; his name wasn't known in the com-
334 pany, and didn't appear to like the name they had taken for the company; that's as near as I can recollect the conversation; this conversation took place between the office of Warren Hale and the bridge, I think; about the conversation at Oaks's house, I've no *no* recollection at all, and don't think the subject was broached there.

Int. 82. Do you know of the negotiations which took place with a view to a connexion between Mr. Warren Hale, Lorenzo Hale, George T. Johnson, Charles N. Stimpson, yourself, and others for the purpose of making and selling piano legs at Dana and Westfield?

Ans. Yes, sir.

Int. 83. Were you a party to those negotiations, and did you attend any meeting, and what?

Ans. I was a party to them, and attended one meeting at Mr. Warren Hale's office, the parties were all there except William N. Oaks.

Int. 84. Who were the parties that were present?

Ans. George T. Johnson, Warren Hale, Lorenzo Hale, Charles N. Stimpson, Warren Stimpson, Mr. Fales, Silas F. Lindsay, and myself.

Int. 85. What organization, if any, took place at that meeting?

Ans. We chose a chairman, I think, Mr. Fales, and a clerk, George T. Johnson.

Int. 86. Was anything said at this meeting in the way of objection to Mr. Lindsay's coming into the concern? If so, what, and by whom?

Ans. I know of no objection made there.

Int. 87. Did Mr. Lindsay, at that time, hold any office in the town?

Ans. I think he did; he was one of the selectmen.

Int. 88. What was proposed, discussed, and voted at that meeting?

Ans. It was proposed to carry on the business under one name at Westfield and Dana; Mr. C. N. Stimpson had some objections, and thought we had better go under two names, one at Westfield and one at Dana; it was voted to have but one name, Warren Hale & Company; I don't recollect what the next proposition was.

Int. 89. What was said or done in the meeting, if anything, in regard to raising funds to meet the first payment for the Westfield property?

Ans. We agreed to make a note; I couldn't say whether we took any action, or more than talked it over; I saw them about making the note, and understood it was carried to Millers' River Bank.

Int. 90. What was said or done in the meeting, if anything, with regard to Mr. Lindsay's joining the concern, and the share he should have?

Ans. Not anything.

335 Int. 91. Who, if any one, rafrained from voting on the propositions raised and discussed at that meeting?

Ans. Not any one that I know of.

Int. 92. Was anything said at that meeting, by any one, to the effect that any proposition there raised or discussed had been already settled? If so, what and by whom?

Ans. Not anything.

Int. 93. Did Mr. Lindsay vote at this meeting without objection from any one?

Ans. I think so; I did not hear any.

Int. 94. In the eighty-first interrogatory you have spoken of a meeting. Is the meeting there referred to the one above testified about?

Ans. Yes, sir.

Int. 95. Mr. Oaks testifies that he and Mr. Charles N. Stimpson came to Dana shortly after this meeting, and found you and Mr. Lorenzo Hale; that after some talk, you asked them to stay until Mr. Warren Hale and Mr. Johnson returned that night, when you would have them go to Oaks's house, and see what could be done. Please state what you recollect of this matter.

Ans. I think they stayed one night. Mr. Warren Hale I did not see, nor Mr. Johnson; and I don't know whether they came home that night. Some one said Mr. Hale came home, but I couldn't tell who it was. Mr. Stimpson and Mr. Oaks came to the shop where I was, the next day, I think. I won't be positive whether this talk was the day they came up or the next day. Mr. Stimpson offered to sell me his interest in the company. I asked him why he didn't offer it to Mr. Hale. He said he had a choice who he let have it. He said the trade must be made soon. There was some other conversa-

to me something of the principle, so that I formed an idea of the principles of the machine. (Question read again.) He asked me if I thought that would infringe the patent; I said I didn't know as it would; he spoke about the offer that Mr. Bosworth made him, and said that Mr. Johnson hadn't used him just right, and spoke of what had been done and said to him by Johnson; I told him if that was so, I didn't know as I could blame him for going to Westfield; that on my part I had rather he would stay at Dana; I don't appear to recollect any further conversation.

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Ans. Yes, sir.

Int. 95. Mr. Oaks testifies that he and Mr. Charles N. Stimpson came to Dana shortly after this meeting, and found you and Mr. Lorenzo Hale; that after some talk, you asked them to stay until Mr. Warren Hale and Mr. Johnson returned that night, when you would have them go to Oaks's house, and see what could be done. Please state what you recollect of this matter.

Ans. I think they stayed one night. Mr. Warren Hale I did not see, nor Mr. Johnson; and I don't know whether they came home that night. Some one said Mr. Hale came home, but I couldn't tell who it was. Mr. Stimpson and Mr. Oaks came to the shop where I was, the next day, I think. I won't be positive whether this talk was the day they came up or the next day. Mr. Stimpson offered to sell me his interest in the company. I asked him why he didn't offer it to Mr. Hale. He said he had a choice who he let have it. He said the trade must be made soon. There was some other conversa-

tion, I can't repeat the words; they didn't stop but a few moments. I said like this to Mr. Stimpson: that I hadn't the means to buy it, but shouldn't be afraid to if I was able. That was said before I asked him why he didn't offer it to Mr. Hale. I can't think of anything more.

Question being read again, the witness says, Mr. Lorenzo Hale wasn't there.

Adjourned to 14th inst., at 10 a. m.

Int. 96. What day of the week, according to your best recollection, was it when Stimpson and Oaks came to Dana, and what day when they had this conversation with you?

Ans. It was Friday they came to Dana; the conversation was held on Saturday, the next day.

Int. 97. Was Mr. Lorenzo Hale present during any part of such conversation?

Ans. No, sir.

336 Int. 98. Did not Mr. C. N. Stimpson give you until the next Monday to take the property off his hands, or did he not say that something must be done "by next Monday," or words to that effect?

(Objected to.)

Ans. He said the trade must be made to-day. He would not agree to wait.

Int. 99. Did you ask him to wait? If so, what did he say?

Ans. I requested him to wait, so as to see Mr. Hale, for I could make no arrangement myself.

Int. 100. According to your best recollection and belief, did Mr. Warren Hale or Mr. Geo. T. Johnson know when they started for New York, that either Mr. Stimpson or Mr. Oaks were coming, or had come, to Dana?

(Objected to.)

Ans. No.

Int. 101. Were they, or either of them, so far as you know, expecting any visit or proposition from either Mr. Stimpson or Mr. Oaks when they started for New York?

(Objected to.)

Ans. No.

Int. 102. Did you then know, or have you since learned, anything which would justify Mr. Stimpson or Mr. Oaks in believing that Mr. Johnson and Mr. Hale had gone to New York so as to avoid meeting them or either of them, or receiving any proposition from them, or had gone slily or secretly?

(Objected to.)

Ans. No; I think they would have been glad to have received any proposition.

Int. 103. So far as you know or believe, did Mr. Hale, or Mr. Johnson, or Mr. Lindsay, or Mr. Lorenzo Hale, or you yourself ever attempt to avoid any meeting with, or proposition from, either Mr.

Stimpson or Mr. Oaks, or desire so to do, relating to the Westfield puschase?

(Objected to.)

Ans. No; but the contrary.

Int. 104. Mr. Charles N. Stimpson testifies that he met you and Mr. Lorenzo Hale at Dana, and told you that he was going to attend a meeting of the stockholders of the Millers' River Bank on Monday, and that he wanted a definite answer before that time whether you would make any arrangement with Mr. Oaks, and take the property off his (C. N. Stimpson's) hands. He also says that this talk was about the middle of the week. Please state whether he is entirely correct, and in what he is incorrect, if in anything.

(Objected to.)

Ans. He is incorrect in saying he saw me and Mr. Hale; and
337 in his statement that he wanted a definite answer before Monday. It couldn't have been the middle of the week, for Mr. Hale was at home at that time.

Int. 105. He also says that he gave you a message which Mr. Fales had sent. Do you recollect this?

Ans. No.

Int. 106. Were you ever in partnership with Charles N. Stimpson? If so, where, what time did you go in, and in what business?

Ans. I was, in North Dana. I went in in 1854, I think, in making pianoforte legs.

Int. 107. Give the name of the concern and of your partners.

Ans. The firm was Stimpson & Co., I think. No; at that time it was Johnson, Stimpson & Co., and consisted of Charles N. Stimpson, Warren Stimpson, George T. Johnson, Silas F. Lindsay, and myself. I don't recollect whether there were any more at that time, there have been so many shifts. William Stimpson may have been one of the partners.

Int. 108. What business was Mr. Nelson Bosworth then in, if you know?

Ans. I can't say, but he was in the partnership at the time. He was in soon after, and may have been at that time.

Int. 109. What was the name of the firm, and who composed it, if you know, before you became a partner?

Ans. It was Stimpson, Doane & Co., or Doane, Stimpson & Co., I don't remember which.

Int. 110. Did you become a partner before or after Mr. George T. Johnson, if you recollect?

Ans. A short time before he did.

Int. 111. What was your share in the business, after Mr. Johnson came in?

Ans. One-eighth, I believe.

Int. 112. Did that firm have a contract with Lyman Wheeler, when you became a partner?

Ans. It did.

Int. 113. When was that contract terminated? How long after you became a partner?

Ans. I couldn't say; I should think some two years or more.

Int. 114. What led that firm to terminate this contract?

Ans. Bad work, or unseasoned work.

Int. 115. Did your firm give Wheeler notice that he was doing bad work? and how?

Ans. Our firm gave him notice. I requested him myself to come over and look at his work, and showed him that it was not seasoned, and you could scrape the water out with your nail.

338 Int. 116. Did the firm appoint a committe to terminate this contract? If so, whom?

Ans. They did; Geo. T. Johnson and myself.

Int. 117. Did you and Mr. Johnson meet Wheeler and make an agreement with him? If so, was this agreement verbal or in writing?

(Objected to.)

Ans. We met Wheeler and made a verbal agreement; there was no writing.

Int. 119. Did Wheeler request you to put it in writing? and did you decline to do? What was said by any of you as to the agreement being reduced to writing?

(Objected to.)

Ans. I think he spoke something about writings, but he said he supposed he could take our words as just as good, but he always thought writing a little better, or something of that kind.

Int. 119. Did any member of your firm, so far as you know or believe, make any objection to reducing that agreement to writing?

(Objected to.)

Ans. No.

Int. 120. What was that agreement?

Ans. As near as I can recollect now, it was that he might make cone legs, newel posts, and, I think, a certain number of sets for billiard tables. I think there was one pattern of melodeon legs he was allowed to make, and any other work that didn't interfere with our business.

Int. 121. Did you refuse to trade unless he would agree to use the machine he then had, and not build one on his own plan, if he had one?

(Objected to.)

Ans. No; we didn't care what machine he built.

Int. 122. Was anything whatever said about this by him or by you, and what?

Ans. Nothing.

Int. 123. Did you ever hear any member of your firm suggest that such a restriction or condition should be made with Wheeler?

(Objected to as leading.)

Ans. No.

Int. 124. Did you ever hear any member of your firm express any apprehension that Wheeler would get up a machine on his own plan, unless restrained by agreement, or anything to that effect?

(Objected to as before.)

Ans. I did not.

Int. 125. Was anything whatever said by you, by Johnson
339 or by Wheeler as to you using or not using any particular machine, after his contract with the firm was terminated?

(Objected to.)

Ans. No, sir.

Int. 126. Were you a member of the firm of Johnson, Stimpson & Co. when they sold out to Mr. Warren Hale?

Ans. I was.

Int. 127. What price did they receive?

Ans. Fifteen thousand dollars.

Int. 128. Had your firm previously appraised that property, and how long before?

Ans. They had; the January previous, I think.

Int. 129. How much was that appraisal?

Ans. About nine thousand dollars.

Int. 130. Did your firm mark for the price among themselves? and if so, state, as nearly as you can recollect, what each one marked.

Ans. They did. Several of them marked $15,000, I can't say how many. I marked that myself, and I think Charles N. Stimpson and Flint Peckham did the same. George T. Johnson marked more, but I can't say how much. The amounts marked didn't vary much, except George T. Johnson.

Int. 131. When this sale was made, did your firm agree to assist Hale in getting the patent extended?

(Objected to.)

Ans. They agreed to give their influence and names to extend it.

Int. 132. When the sale was made did you believe that your firm would have no right under the extended term?

(Objected to.)

Ans. I did.

Int. 133. Did your partners understand this, so far as you know?

Ans. I think they did.

Int. 134. What professional advice, if any, did they have? from whom, and to whom was it given?

Ans. They had Mr. George Gifford's advice, of New York. It was given to Silas F. Lindsay and myself. I understood Mr. Gifford to say that those then holding deeds of the patent would have no right to the extended patent. Mr. Lindsay asked him several questions about it, and understood him the same. After that I went to the Scientific American office, (this was a short time before making application for an extension;) from what information I could get from them I came to the same conclusion that Mr. Gifford did, and supposed it was correct.

340 Int. 135. During the year 1856 did you go to Westfield to Bosworth, Loomis & Co.'s place? and if so, for whom did you go, and for what purpose?

Ans. I went to Westfield, I couldn't say whether in '56 or not; sent there by Johnson, Stimpson & Co. to see what I could learn about the machine that they had built, and to see the new style of piano legs they were making. I saw some new styles of legs, and

was refused to look at the machine. They kept the doors closed where the machine was. Mr. Bosworth and I had some conversation about the machine. He said if he were disposed to sue him, we might try it on as soon as we pleased; that he had no fears, and gave me an invitation to take an interest in the business with them.

Int. 136. At the time Johnson, Stimpson & Co. sent you to Westfield, was there any talk among them as to stopping Bosworth, if they could? If so, what was said, and who said it, as near as you recollect?

Ans. There was some talk about it. I think most all of the company had something to say about it. It had been mentioned in meetings when we were together, but we didn't know how the machine was built, and therefore did not make an effort to stop it till we should ascertain what the machine was.

Int. 137. Who composed the firm at this time?

Ans. Charles N. Stimpson, Warren Stimpson, George T. Johnson, myself, Silas F. Lindsay, Nelson Bosworth, I think—I couldn't say but William Stimpson, and Dexter Haskell—I couldn't say certainly, he owned awhile in the company; about a year, I think.

Int. 138. What was the name of the Bosworth in Bosworth, Loomis & Co.?

Ans. Albert Bosworth.

Int. 139. Did you ever say to William N. Oaks, Albert Bosworth, or anybody else, that a machine like "Stimpson, H. L. H., U. S. com'r," would not infringe the Hale & Goodman patent?

(Objected to.)

Ans. I never did. I suppose I might make some explanation. I've been asked several times by different individnals whether a machine constructed so and so, but not getting the idea fully of what they meant, would infringe. I may have said I didn't think it would, and I might have said so to Oaks, and I might have said that our claim in the original patent didn't cover the invention, by which some infringers might escape. I have never seen a machine capable of manufacturing pianoforte legs that I thought evaded the patent, or the invention.

Int. 140. Mr. Rufus Powers testifies that he had some talk with you, in which you explained the principle of your machine, and that he then told you that he had had a machine on the same prin-
341 ciple for two or three years, and thought he ought to have some share in the patent you were about to apply for. Please state this conversation as you recollect it.

Ans. I recollect talking with him. The first conversation was about getting some work done, or letting me have the privilege of his shop to do it. Before I could get an answer, he wished to know what I was going to do. I told him in part what I was going to try to build, and that I thought it probable I should get it patented, and requested him not to say anything about it for the present, and he refused to let me have the chance in his shop, or to do the work himself, and said he was short of water. Then he said I was on his plan; that he was about getting up a machine that would do round work. I told

him I'd like to see it. He refused to show it to me. He said he thought he'd ought to come in on the machine I thought of building. I told him I had no objection, if he had got anything on the round work, and I would see Mr. Hale. I went home, and Mr. Hale and I went over and saw Mr. Powers. He told us he had got something for round work, but we could get no evidence of it. He appeared to be anxious to have his name put in the application for the patent. I think we didn't agree to have his name put in; but we told him we'd let him have the round work; that we didn't care anything for that. We then left him, and concluded that he hadn't got anything. He could produce nothing, and we supposed it was some idea that he had of a machine, but that in reality he had no machine; we told him we'd make out writings to give him the round work, and went home and did so, and left them with Jonathan E. Stone.

Int. 141. Were these writings ever executed and delivered? and if not, why not?

Ans. They were executed and put in Jonathan E. Stone's hand, and when he (Powers) complied with the agreement he was to have the writings. Stone was to give them up to him.

Int. 142. What was this agreement that he was to comply with before the writings were to be delivered?

Ans. I think he was to sign a writing agreeing to pay a certain portion of the expense of taking out the patent.

Int. 143. Did Powers ever, in fact, show you any machine before the date of your patent? and did you, at that time, believe that he had any machine such as he claimed to have?

Ans. He never showed me any; I did not believe that he had any such machine; he didn't produce any evidence of it.

Int. 144. Did you see the machine for using which Mr. Alanson E. Brooks was sued in New York?—I mean in the second suit against Mr. Brooks. If so, please describe that machine fully and particularly.

342 Ans. I never saw it; I think I at one time saw a model of it that some one got up.

Int. 145. Where was this model?

Ans. I think I saw it in New York; it was used in the suit; I think the expert that Johnson, Stimpson & Co. employed had it at his office, and that I saw it there.

Int. 146. Please describe this model fully, stating how it is like or unlike Exhibit "Stimpson No. 2, H. F. S."

Ans. I didn't see it but a moment, and don't think I can describe it fully. As near as my recollection goes, the carriage that carries the work had one end attached to a sliding carriage, so that it would swing to and from the cutter. The reason why I didn't take more notice of this machine was that the expert was going to leave and we had not time to look at it longer. It resembled this machine very much, except that there is no second sliding carriage on this model.

Int. 147. Do you recollect what sort of an index or dial plate that model had?

Ans. I could not say as to that.

Int. 148. Do you know the reason why that second suit against Brooks was settled? If so, state it, and how you know it.

Ans. No more than what I heard some of Johnson, Stimpson & Co. say.

Int. 149. Who were the complainants in this second suit against Brooks?

Ans. I couldn't say whether the suit was commenced before the forming of Johnson, Stimpson & Co. or not. Chas. N. Stimpson, I know, was one of the complainants. I don't appear to recollect any others now.

Int. 150. What reason did you hear stated for settling the second Brooks suit, by C. N. Stimpson or any of his partners?

Ans. I heard C. N. Stimpson say that the lawyer for Brooks said the Springfield profile machine was like the Dana leg machine—the patented machine—and that Brooks's machine was no infringement, and that the opposite party had made a model, or described the Springfield machine to George Gifford; and Gifford said if that was so, that is, the Springfield machine was like they described it, or like the model, we might as well give up. Mr. Stimpson said he thought it was as well to stop the suit, make arrangements with Brooks to let him go on, and he was to let it go that we had the case, and that he had paid for a right. I was sent to Springfield by the complainants to meet George Gifford there, and examine the machine ourselves. I went there and examined the machine, but Mr. Gifford didn't come. I always felt anxious to have the case carried on, and always expressed that to the company.

Int. 151. Were the ogee legs, made on your first machine,
343 like or unlike on all their faces? and how did they compare in this respect with similar legs made by hand?

Ans. Of the legs made by the first machine, the surfaces were alike. As made by hand, the faces were near alike, but not perfect.

Int. 152. Before this first machine was built, had you ever seen or heard of any machine for cutting profiles, or making polygons of any kind? If so, describe the machine.

Ans. I never had, except Blanchard's turning lathe for turning spokes, axe-helves, and gun-stocks.

Int. 153. In that first machine how was the leg squared to cut the different sides? Please explain that a little more fully.

Ans. It was squared by drawing lines across the top of the block at right angles; then we placed it into the carriage and brought the line as near as we could by the sight of the eye with the end-piece of the carriage, as level with it as we could; it was tightened up then with a screw from the other end of the carriage, and the machine was ready for operation.

Int. 154. Of what material was this machine principally made, especially the upright frame which held the cutters?

Ans. Mostly of wood, and the frame that held the cutters was made of wood.

Int. 155. How did the workmanship and material of this first machine compare with the second as to quality and fitness?

Ans. It was very inferior to the second one; damp weather would affect it very much. It was set in a saw-mill, and when we came to use it in the morning, sometimes, we had to loosen parts of it before it would run, although it worked well the night before.

Int. 156. How much more work could be done on the second machine than on the first?

Ans. We could do ten sets with the second machine easier than we could do one set with the first machine. It took two hands to run the first machine at all, on account of its having no index or dial.

Int. 157. What, in your judgment, is the advantage, if any, of having the cutters in a swing frame, rather than in an upright frame, if both are equally well made?

Ans. There is not any advantage.

Int. 158. What sort of an index did the Patent Office model have? Please describe it fully.

Ans. It was put on the same as in "Stimpson No. 2." It was held by a catch or spring. . I can't say certain as to the material. I made several models with dials, and can't recollect what the metal was on this particular one.

344 Int. 159. You say that you sold your interest in the invention before the application for a patent. Did you make a deed of your interest in the patent afterwards? If so, to whom, and when?

Ans. I did, to Jonathan E. Stone. It might have been a year, or it might have been two, after the patent issued. I made an agreement before to assign my interest in the patent when I was called upon to do so.

Int. 160. Please state just how much attention the operative is called upon to give to his left hand in using the Dana machine, how much concentration of mind it requires, and generally how great the difficulty is in moving the right and left hands at the same time.

Ans. I have cut plain melodeon legs by only using my right hand. To take the most irregular form we could cut, by having sufficient weight on the swing-frame that carries the cutting cylinder the machine can be governed almost wholly by the right-hand crank, except rising over abrupt places, then it wants easing a little with the left hand. When the machine is in motion, by keeping a steady turn on the right-hand crank, you feel the left-hand crank in motion so as to notify you what wants to be done. Running the carriage through a few times and keeping hold of the crank will readily teach anyone how to operate the machine.

Int. 161. You have denied in your seventy-fourth answer that you ever threatened to make a machine to evade the Hale and Goodman patent, in order to make legs on your own account. Did you at that time know of any such machine, or had Wheeler before that time, or did he then tell you that he knew of any such machine?

(Objected to.)

Ans. Not to my knowledge.

Int. 162. Please read your eighty-first answer, and state whether the conversation there testified to took place on the day of the meeting spoken of, or not?

(Objected to.)

Ans. I think it did.

Int. 163. You say in your one hundred and twenty-seventh answer that you received $15,000 from Mr. Hale. Was this for the whole property, including stock? and if not, how much was paid for whatever property it does not include?

Ans. It was not the whole property; the stock and the rest amounted to somewhere about $10,000; it was not paid for down.

Int. 164. Mr. Charles N. Stimpson has testified that you refused, on some occasion, to go to New York as a witness unless paid $500, or some other sum. Please state what you recollect about this transaction.

(Objected to.)

345 Ans. I heard they were about calling on me again to go to New York as a witness in the first suit, I think, with Brooks, and recollect my wife said she thought my pay rather small before, and I made the remark, in a joking way, that I would go for five hundred dollars. I never was called on to go. I made the remark before my wife, and I think there were some others in there. I can't say as I made it to her directly. It was soon reported that I wouldn't go unless they would pay me $500. I told my wife that I would go if they called upon me, and that she might go with me.

Int. 165. How many men are employed at North Dana at W. Hale & Co.'s place in the manufacture of legs?

Ans. I should say thirty, perhaps more.

Int. 166. How many at Stimpson & Co.'s, as near as you know?

Ans. I've no means of knowing how many.

Adjourned for cross-examination, 15th September, 1864.

SEPTEMBER 17*th*, 1864.

Cross-examination:

Cross-int. 1. At the time when you constructed the first machine, had you or Mr. Hale seen the Gardiner machine, or any other machine of that character, or had you any knowledge of such machines?

(Objected to as already answered.)

Ans. I had never seen or known of such machines. I have no knowledge that Mr. Hale had.

Cross-int. 2. When did you first obtain knowledge of that machine and of the Springfield machine?

Ans. I couldn't tell exactly—perhaps a year or two after building our first machine. My answer applies to both the Springfield and the Heywood, or Gardiner machine.

Cross-int. 3. At the time when you made that first machine, did you believe that you were the first inventor of the mechanism for planing irregular forms by means of a pattern and a movable cutter in the way in which they were planed in that machine, as distinguished from the Blanchard machine?

(Objected to as incompetent.)

Ans. I certainly believe that I was the first inventor—that, is Mr. Hale and myself.

Cross-int. 4. Did you at that time know of the use of the dial or index in other machines for holding and turning work?

Ans. I recollect seeing a machine for cutting gear that I don't know but might be considered as having a dial for holding and turning.

346 Cross-int. 5. Had you ever seen a machine for boring hubs, or doing any work in connexion with hubs, in which a dial or index was used?

Ans. I never had, at that time, to my knowledge.

Cross-int. 6. Independently of its combination with your machine, and considered by itself, did you consider yourselves to be the inventors of the index or dial?

(Objected to.)

Ans. I don't recollect that when we got up the machine this dial for cutting gear was brought into mind at all; the necessity for a dial for turning, with setting a block for cutting different faces, suggested the invention.

Cross-int. 7. At the time when the use of the dial was suggested, whenever that might be, did you believe that you were the first inventor of the dial itself, or only of its application to your machine?

(Objected to.)

Ans. I don't think that was brought into mind, to take the dial separate at that time.

Cross-int. 8. How long after the first machine was built was it before you thought of applying the dial to it?

(Objected to as assuming that it was after the first machine was built that they thought of applying the dial to it, witness having testified on direct examination that they thought of it and talked of it before that time.)

Ans. We thought of it when we were building the machine.

Cross-int. 9. Why did you not apply it to that first machine?

(Objected to as already answered in direct examination.)

(Ans. It was on account of the delay it would make in finishing the machine.

Cross-int. 10. You did not consider then, at the time that machine was finished, that it embraced all you believed you had invented?

(Objected to.)

Ans. No, sir.

Cross-int. 11. Why didn't you apply a dial to that machine after it was first constructed, during the year that you used it?

Ans. I should, if I had had the whole control of the machine, but Mr. Hale was very close about expending anything for the improvement of the machine when he could possibly get along without, if it would do twice the work.

Cross-int. 12. Which end of the leg was it, the large or small end, which was forced on to the points in the manner you have described?

Ans. The large end.

Cross-int. 13. How was the small end held?

Ans. With a screw.

347 Cross-int. 14. Did the screw merely press against the end, or did it enter a hole in the end?

Ans. It pressed into the centre against the end.

Cross-int. 15. How was the correct position of that end of the leg determined in setting work?

Ans. It was determined by having the screw put to the centre of the leg. The screw was a wooden screw with a litte point (a piece of a nail I think) in the end. The nail was pointed, and was put into the wood so as to strike this centre in the same way as we do now. We use an iron now instead of a screw driven into the centre of the leg in the same way.

Cross-int. 16. In turning the leg to plane different sides, the small end turned on this centre, did it not, in the same way in which it does now?

Ans. Sometimes it dropped off, and when it was put back it was put on to the same centre, being turned one face.

Cross-int. 17. When it didn't drop off from the centre, how was it done; did it turn on the centre or not?

Ans. We had an assistant at the foot of the leg that held it and unturned the screw, and drew the leg back with the other hand off of the spurs, then turned it one-fourth round; the assistant at the other end holding on to the large part of the leg, and keeping it steady, while the assistant at the small end pressed it up with the screw on to the spurs.

Cross-int. 18. Did you always have two men to run that machine?

Ans. Yes, always when I had anything to do with it.

Cross-int. 19. Did you never see one man run it alone?

Ans. I never did. Sometimes three.

Cross-int. 20. What did the third man have to do?

Ans. Help steady the leg.

Cross-int. 21. How was the correct longitudinal position of the leg determined? that is, how was the centre of the leg brought into the proper line?

(Objected to as already explained.)

Ans. The carriage was centred and the leg also, the carriage being made square, by placing a leg in the lines on the carriage to bring it on to a longitudinal line.

Cross-int. 22. What do you mean by the carriage being centred and the leg also?

Ans. I mean there was a line drawn across the centre of the carriage, and a mark with a pencil was made across both ends of the leg.

Cross-int. 23. Do you mean that the lines were drawn across the top of the ends of the carriage or cross-pieces?

Ans. Yes, sir; they were drawn so as to show us how to

348 bring the leg into the centre. The screw determined one centre, being placed under where this line was drawn across the top of the carriage. The lines were drawn across the top of the ends of the carriage. The end-piece at the small end of the leg was

built high enough to receive the screw, the screw being level with the top of the other end of the carriage. The top of the cross-piece determined the height to bring the centre of the large end of the leg to, and the cross line on the top piece showed where the centre of the leg should be longitudinal.

Cross-int. 24. You mean that the screw determined the position of the small end of the leg by its point entering the centre of the end of the leg, and that it was not necessary to pay any attention to any lines on that end of the leg or on the cross-piece to give to it its proper position?

Ans. Yes, that is what I mean.

Cross-int. 25. Were the lines that you have spoken of as being on the top of the leg drawn on the end of the leg, or on the side of the leg near the end?

Ans. On the end of the leg.

Cross-int. 26. These lines, if I understand you, were brought up even with the top of the cross-piece, and in that way the vertical position of the leg, or its position in reference to the cutter, was determined. Am I correct in this?

Ans. Yes, that was determined in that way.

Cross-int. 27. Now was some other mark made on that end of the leg to determine its position horizontally and bring it into the right line with the point in the end of the screw?

(Objected to as clearly answered in cross-int. 23.)

Ans. The first marks were used for that purpose.

Cross-int. 28. What marks do you refer to, and how were they placed on the leg?

Ans. There were lines drawn at right angles across the leg, (two of them,) crossing at right angles at the centre of the leg. To determine the horizontal position of the leg, the centre where the lines crossed was brought to the line across the cross-piece of the carriage. To determine the vertical position of the leg, the horizontal line was brought on a level with the cross-piece of the carriage. Sometimes we had a rest after cutting the first side, under the carriage on which the end of the leg rested, to cut the opposite side; the block was placed so as to bring the upper side of the block in the right place.

Cross-int. 29. The practical advantage of the dial was that by its use you could set the leg to its different positions to cut the different sides, by simply turning it on the centre, without releasing it from the machine, or unclamping it, and without the necessity of
349 resetting it at each time, by reference to the lines you have spoken of?

Ans. That is one advantage; and another is, that the dial is quickly put upon the leg, and easily put into the machine and quicker.

Cross-int. 30. How much was this machine used during the time that you used it?

Ans. It was used a considerable part of the time after it was put in operation.

Cross-int. 31. How many men were employed at the time you used that machine, and who were they?

Ans. Five, I think, most of the time; Warren Hale, myself, Lorenzo Hale, Franklin Vaughn, and Nelson Bosworth.

Cross-int. 32. Were they all employed in the leg business all the time?

Ans. Not in the first start.

Cross-int. 33. What other business did Mr. Hale carry on during that year?

Ans. He had a job for making music desks, as we called them. Mr. Bosworth worked on them some. I think he had only one job that he had taken, and he finished them up. I think that was the last.

Cross-int. 34. What other business did Mr. Hale carry on at that time?

Ans. He had a saw-mill that he run. Dexter Tolman or Sylvester Goodnow, I think, run it at the time.

Cross-int. 35. Did he have any other business?

(Objected to as immaterial.)

Ans. I don't appear to recollect of any other now.

Cross-int. 36. Didn't he run a shingle machine and a grist-mill?

Ans. He didn't run it, it was run by some one else. He owned the shingle machine, grist-mill and saw-mill at the time. He had charge of the business, I think.

Cross-int. 37. Did you work all the time upon the leg business during that year?

Ans. Most of the time.

Cross-int. 38. What else did you attend to besides the leg business?

Ans. I worked at the patent model.

Cross-int. 39. What else?

Ans. I don't appear to recollect of anything else.

Cross-int. 40. When did you sell out your interest in the invention to Mr. Stone?

Ans. In the spring of '45, I think.

Cross-int. 41. What were your reasons for selling?

350 Ans. I wasn't fully satisfied with the proceedings of Mr. Hale, was one reason. One reason was, I think, in February previous, in a conversation we had before, I expected Mr. Hale was going to take the model and apply for a patent. The model was finished and ready. He started to Boston with some work. I ran and overtook him, and asked him if he wasn't going to take the model and apply for a patent. He said he wasn't. We had some disagreement as to the shares of the right, but I had finally agreed to take one-fourth, and expected things would have gone right along, but his refusing to take the model made me think something was afoot, and soon after he was gone Mr. Stone came to me and asked me what I would take for my interest in the invention. I told him, and he took me up. I thought I'd make sure of something while I had a chance. This might have been in March; I couldn't say. I mean the time Hale went to Boston.

Cross-int. 42. How much did you get for your share?

Ans. Five hundred dollars.

Cross-int. 43. How came there to be a difference between you and

Mr. Hale as to the shares you were to have? How much did he claim, and how much did you claim?

Ans. I expected to have one half-interest in the invention. He thought it was through his means that we got hold of it, and that he had the water-power and privilege for doing the work, and had ought to have more. He said I was at work for him by the day, all except getting up this machine, and that he supposed he could hold me by the day on that. I thought I wouldn't have any difficulty with him about it, and agreed to take up with one-fourth interest in the invention.

Cross-int. 44. Did he claim the whole interest?

Ans. He said he thought I didn't invent but a small part of it, and he would give me a good chance for a job, and that I had ought to be satisfied with one-fourth interest. I don't know as he claimed the whole interest.

Cross-int. 45. What was the small part that he thought you invented?

Ans. I don't know as I can tell, or as he explained it fully. One was, I think, the tracing rollers on the pattern. I don't recollect clearly about it now what it was.

Cross-int. 46. What part did you think you invented?

(Objected to.)

Ans. I thought I explained the biggest part of the machine to him in conversation. He said he didn't understand it so.

Cross-int. 47. How much of it did you explain to him?

Ans. I explained to him the whole principle of the machine, I thought. I had the whole idea in my head a very few moments after I thought of it at all.

351 Cross int. 48. How did you come to think of it?

Ans. The work that we had taken to do introduced the views and the principle of the machine.

Cross-int. 49. Who first suggested the idea of having any machine?

Ans. I thought I did.

Cross-int. 50. Do you think so now?

Ans. Yes.

Cross-int. 51. How soon after you first thought of it before you got the whole principle of the machine in your mind?

Ans. It wasn't but a few moments before I had the principal view of how the machine might be got up. I did not get upon every item of the machine at the first view, only how it might be done. The only objection I saw to a revolving cutter was about its clearing the shavings. I didn't know but there might be trouble with clogging the knives with chips, shavings, &c.

Cross-int. 52. Did you have a full idea of the carriage with the pattern, and of the movement of the cutter up and down to correspond with the pattern?

Ans. I did. I saw that there could be patterns placed on the carriage, and having this cylinder guaged by the patterns it would cut out a form like the patterns. The work was, of course, to be placed on the carriage. At the same time this other plan struck me of one

pattern to move the carriage to the cutter, and have the cutter stationary. One other plan struck me, that was to have a carriage with four patterns on the ways, and a carriage with four rollers. The patterns to be all alike, two at one end of the machine, and two at the other. The cutter to be stationary, and the carriage running on these patterns.

Cross-int. 53. Were these all your own ideas?

Ans. I suppose so; I never heard any one say anything about them.

Cross-int. 54. In respect to the machine which you patented, did you have the idea in your mind how the movements of the carriage and the cutter were to be obtained?

(Objected to.)

Ans. I hadn't all the bearings, and everything laid out; there were various ways of doing it, and I had no apprehensions at all about its going, if the cutter would only keep clear of clogging.

Cross-int. 55. Will you explain more fully the idea you had of a machine which would use a single pattern?

(Objected to.)

Ans. I think one was to place the pattern directly over the centre of the cutter frame; the cutter frame to be movable, and the pattern to be moved with the carriage. I think I must be mistaken
352 in my fifty-second cross-answer, when I spoke of having the cutter stationary. I must have referred to the carriage with four patterns. It's so long ago, and there's been so much said, that I get mixed up when these plans now first came into my mind; I was correct as to the four patterns and as to the two patterns.

Cross-int. 56. When did you first explain these plans to Mr. Hale, and what did he say in respect to them?

(Objected to.)

Ans. I spoke to Mr. Hale going home from Boston after we took the job from Gilbert, and told him there might be a machine made to make those legs, I thought. He said we might square them up in a lathe; that is, turn the ends off square. He thought he shouldn't want to try to get up any machine only what we were obliged to do to make the legs—a jigger-saw, &c. After we got home, every few days I would speak about the machine for making those legs. He didn't appear to have much idea of doing anything to make a machine at present—didn't seem interested in it at all. After commencing sawing and fitting to the caul he began to see the necessity of a machine to cut out the legs. I said to him there was but one thing about building a machine that I wished to know, that was to know if the knives would keep clear in cutting, and that if he would turn out an arbor about the right size, of hardwood, I would go and make some cutters, and we would try the cutting, to know for a certainty before we commenced making a machine. I made the knives and put them on the arbor, put it into the lathe, and took a piece of plank, or board, laid one end on to the lathe, and raised up the other end, brought it in contact with the cutter, and raised it high enough to bury the cutter in the plank. There was no clogging or jarring in the cutting. I told Mr. Hale then we could build a machine to do the work, and if

he'd take hold I'd be at one-half the expense of building the machine, and if he could spend time there we would make our plans and commence building the machine. We made our plans and commenced the machine. I went to work on the iron work, and he on the wood. I had the idea at the time we were going from Boston how a machine might be built. I mentioned something to him about it then; didn't talk much about it as we were riding; I explained it fully after making the experiment above referred to; I then went to work and made the drawings. I had mentioned it frequently before, but never had made any plans until that time.

Adjourned.

JANUARY 20, 1865.

Cross-int. 57. Did you get up a machine for making pianoforte legs and patent it, in connexion with Mr. Gibbs, known as the cam machine?

353 Ans. I did.

Cross-int. 58. When did you do that?

Ans. I think about 1848. I couldn't tell exactly.

Cross-int. 59. Did you build a working machine according to that patent, and use it?

Ans. I built one according to that patent, and cut some legs in it.

Cross-int. 60. Did you use an index on that machine?

Ans. Yes, sir.

Cross-int. 61. What became of the machine?

Ans. I think it was burned up, or a part of it.

Cross-int. 62. Was it burned while you owned it?

Ans. Come to think it over, I think I didn't own it at the time.

Cross-int. 63. To whom did you sell it, or how did you dispose of it?

Ans. I don't know as I can tell; I think I sold a part of the machine to a man that lived in the western States; it was worked over into a machine like the original patent of Hale & Goodman.

Cross-int. 64. When was it worked over?

Ans. Some two or three years, I should think, after it was first built.

Cross-int. 65. Did you make more than one machine of that kind?

Ans. I helped make two on that principle; one was for making bedstead posts.

Cross-int. 66. What became of the other machine?

Ans. I don't know.

Cross-int. 67. For whom was it built?

Ans. William G. Hermance.

Cross-int. 68. Where did he reside?

Ans. At Nassau, New York, at that time.

Cross-int. 69. At what time was this machine built?

Ans. I think in 1849.

Cross-int. 70. What disposition did you make of the patent?

Ans. I assigned one-half of my interest in it to William G. Hermance, and he was to go on and dispose of the patent rights and give me half of the income; I won't be positive, but feel pretty positive it was one-half that he was to give me.

Cross-int. 71. Did you own the whole patent at the time of that arrangement with Mr. Hermance?

Ans. I could not certainly tell whether I owned it or not. I had authority to make this contract with him, whether I owned the whole or not.

Cross-int. 72. At the time of your vist to Westfield, soon after that establishment was started, did you examine any new patterns
354 of legs which they were making, and make legs of that kind yourself, or similar to them, after that?

Ans. I examined legs at Westfield; the patterns were changed a little from what we were making, (of some parts of the legs.) I made patterns as near like them as I could by the eye, and made some legs; I was sent up to Westfield for that purpose in connexion with other business.

Cross-int. 73. Did you tell Mr. Oaks, or any other person in the establishment at Westfield, that you came up to examine their new styles of legs, and that you proposed to copy them?

Ans. I don't recollect that I did.

Cross-int. 74. When did you first know how the Westfield machine was constructed?

Ans. I think it was at the time we were carrying on the suit with Brooks, in New York, that I got some information about it; I got some ideas from what Oaks mentioned about it, but still didn't know the construction of it. At the time I was at Westfield to examine the legs, I saw some patterns that I concluded were made for the machine.

Cross-int. 75. Do you mean to be understood by the first part of your last answer, that you obtained some information as to the construction of that machine, at the time you spoke of, from some other person besides Mr. Oaks?

Ans. I couldn't say any particular person; I think I heard Charles N. Stimpson speak of it at the time we were carrying on the suit, but can't be certain whether that was the time; it might have been since.

Cross-int. 76. At the time you saw the patterns at Westfield, which you have referred to as a part of the machine, did you understand, or did you suppose that you understood, the construction of the machine, how such patterns were used, and how the machine was operated?

Ans. I saw some wooden patterns, or a pattern; the form of it was considerably like the swing frame; I mean a pattern for casting; I concluded it to be a pattern for the part which held the cylinder cutter; I did not, at that time, suppose that I knew the construction of the machine any further than the pattern was similar in construction to part of ours; I only had a glance at it; I knew nothing about how it was operated.

Cross-int. 77. Did you at that time suppose that the machine had elongated patterns, and was constructed, used, and operated in the manner which you have since found it to be?

Ans. I think not at that time.

Cross-int. 78. When did you first learn how it was constructed, used, and operated?

355 Ans. I've no recollection of learning till I saw it after Stimpson had formed the company at Westfield.

Cross-int. 79. Did you or not at that time of your visit to Westfield suppose that the machine was constructed in accordance with the information which you had received from Mr. Oaks and Mr. Stimpson, or any other persons?

Ans. I hadn't got any particular idea how it was constructed.

Cross-int. 80. Will you state what explanations Mr. Oaks gave you previous to that time as to his machine?

Ans. He didn't give me any that I understood.

Cross-int. 81. What did he tell you about it?

Ans. I couldn't tell the words that he told me. He talked something about a machine, or plans for a machine, or something like that; I didn't have much interest in it; didn't consider that it would amount to much unless he built something nearly like ours.

Cross-int. 82. Did you talk to him more than once about it before that time?

Ans. I don't recollect now.

Cross-int. 83. What did Mr. Charles N. Stimpson tell you about it before that time?

Ans. I don't know as I can repeat the words he told me, but I think there was something said—I couldn't say certain—that is my impression.

Cross-int. 84. Did you learn from Mr. Oaks, or any one else, previous to your visit to Westfield, that he proposed to use a pattern in his machine made longer than the work which he intended to plane?

Ans. I concluded from what had been said by him that he had an idea of getting up something similar to the cam motion—in what form, or how, I never learned until after it was exhibited.

Cross-int. 85. In your answer to the one hundred and thirty-ninth interrogatory, you say as follows: "I have been asked a number of times by different individuals whether a machine might be constructed so and so, but not getting the idea fully of what they meant, I may have said I didn't think it would infringe, and I might have said so to Oaks." If you made any such statement to Mr. Oaks, did you do it with the idea that his machine was something similar to your cam machine, as stated in your last answer?

Ans. I might have had that idea—he didn't show me anything—it was merely bare talk. I generally let people have their own opinion; it was something I didn't trouble myself much about at that time.

Cross-int. 86. Didn't you consider your cam machine an infringement of the Hale & Goodman machine?

356 Ans. I did not at the time I got it up.

Cross-int. 87. And you did not, at the time you made any such statements to Oaks, did you, if you made them?

Ans. I did, if the claim in the Hale & Goodman patent was broad enough to cover their invention.

Cross-int. 88. If you had the idea that Oaks's machine was similar

to your cam-machine, and that your cam machine was an infringement of the Hale & Goodman patent provided the claim was broad enough to cover their invention, what did you mean by telling Oaks that you didn't think it would infringe?

Ans. I don't know that I ever told him so. I said that I told him that I didn't know that it would, because that I did not get his idea so that I could tell. It was but the talk of a moment, and nothing shown.

Cross-int. 89. Didn't you think it would infringe if it was similar to your cam machine?

Ans. I don't know as I did, the way the claim laid on the Hale and Goodman patent at the time.

Cross-int. 90. When did you come to the conclusion that the cam machine was an infringement of the Hale & Goodman patent, if the claim therein was broad enough to cover their invention?

Ans. As soon as we got the reissue. I came to the conclusion long before we got the reissue that the invention was in the Hale & Goodman machine, if the original claim covered it.

Cross-int. 91. When did you first come to that conclusion?

Ans. I can't give the date. I know it was some time after we had the first suit with Brooks, in New York—some time near the commencement of the scond suit, I should think.

Cross-int. 92. What brought you to that conclusion?

Ans. Reading over the patent claim, and seeing that we had not covered what there was in the invention by the claim. I think that was one thing. I'm not sure but all. I saw that we hadn't got the dial-plate covered in the claim.

Cross-int. 93. Did you inform any person of the conclusion you had come to?

Ans. I think I informed Johnson, Stimpson & Co., when most of the partners were together.

Cross-int. 94. Which of the partners?

Ans. I don't know but they were all there. I'm sure there were some three or four.

Cross-int. 95. Will you name the persons who were there?

Ans. I think, George T. Johnson, Silas F. Lindsay, Charles N. Stimpson.

357 Cross-int. 96. Did you do this immediately after you came to that conclusion?

Ans. I couldn't say as I talked it at any meeting of the company at first, but I talked it to individuals that were interested in the patent. I wished to have the patent surrendered and get the reissue, and thought if we had the actual invention secured in that way, there was no machine in operation but that infringed.

Cross-int. 97. What did the partners say to what you told them?

Ans. I think there were some one or two rather favorable to the surrender, and others appeared to be indifferent to it.

Cross-int. 98. Who were they that were favorable to it?

Ans. I think that Nelson Bosworth was one at that time, and Silas F. Lindsay.

Cross-int. 99. In your cam machine there was an outline of the pattern or outline of the work formed on the periphery of a wheel which constituted the cam, was there not?

Ans. It was similar to the work, but much larger and longer than the work. The outline was brought into a circular form.

Cross-int. 100. How was this cam moved in planing the leg?

Ans. By a crank and pinion.

Cross-int. 101. By the same crank and pinion which moved the carriage that carried the work?

Ans. By the same crank, but not the same pinion.

Cross-int. 102. Was the cutter raised and lowered by the action of the cam?

Ans. It was.

Cross-int. 103. In this respect was the Oaks machine similar to it?

Ans. In this respect, that the elongation of the cam was similar to the Oaks, only this was on a curve and that in a straight line. I think the cam would work the best on raising the cylinder cutter, by revolving.

Adjourned.

Resumed 24th January, 1865:

Cross-int. 104. You say, in answer to the eighty-sixth cross-interrogatory, that you did not consider your cam machine, at the time you got it up, an infringement of the Hale & Goodman patent; what did you consider the difference to be, at that time, between the two machines?

Ans. I thought in the first machine, the Hale & Goodman machine, the claim on the patent was confined to a perfect pattern of the work to be done, and I didn't consider that the claim would hold the cam motion. I was not very well versed in patent claims at that
358 time, but after being at the circuit court, in New York, I became more familiar with patent laws.

Cross-int. 105. Did you, at the time referred to in your answer to the one hundred and thirty-ninth direct interrogatory, or at any of the times you have referred to when you conversed either with Mr. Oaks or with any other person about his machine, consider his machine to be an infringement of the Hale and Goodman claim as it then was?

Ans. As the claim then laid, on the machine, I didn't view it to be an infringement.

Cross-int. 106. Did you express that opinion to those of your firm with whom you talked about that time, in relation to the machine?

Ans. I should think likely I had. I don't appear to recollect.

Cross-int. 107. You say, in answer to the second cross-interrogatory, that you first learned of the Hayward machine used in Gardner in making chairs, and the Springfield machine used in the armory at Springfield, a year or two after the building of your first machine. After you learned of those machines did you consider that there was any substantial difference between them and your machine, excepting so far as your machine was affected by the use of the index or dial?

Ans. There was considerable difference in the operation of them.

I had an idea at the time, that there was a material difference between the machines

Cross-int. 108. What was that difference?

Ans. The Hayward machine had the work fed through by water-power, and there was a bed conforming to the shape of the work, which was dogged to hold it in its place; while the Hale & Goodman machine had to be worked by hand in order to make work. In the Springfield machine the carriage was shoved through by hand, and a perpendicular shaft held the cutters to do the work, while the Hale & Goodman machine had a horizontal shaft. There was difference in the manner of holding the work in the Hale & Goodman machine.

Cross-int. 109. When you learned of the existence of the Hayward machine and the Springfield machine, did you also learn that they were constructed and used before you got up your first machine?

Ans. I understood that the Hayward machine had been used before. Of the Springfield machine I did not learn, at that time, how long it had been in use.

Cross-int. 110. When did you first learn that the Springfield machine had been in use before you got up your first machine?

Ans. I can't tell when.

Cross-int. 111. After you learned that the Hayward machine
359 was constructed and used before you got up your first machine, did you consider that it invalidated your patent as it then stood, the index not being included in the claim?

(Objected to.)

Ans. I did not when I heard of it at that time.

Cross-int. 112. Did you at any time after that?

Ans. I thought that came the nearest to it of anything that I had seen. I had a query about it after discovering that our claim didn't cover the invention.

Cross-int. 113. Did you form any opinion upon that point? If so, what was it?

Ans. I think I rather thought there was some chance to hold it as our claim laid, and I told, I think, Nelson Bosworth the same.

Cross-int. 114. Upon what ground did you think it might be held?

(Objected to.)

Ans. I think the claim read, "in the manner above described," and I thought that might include the description of the machine.

Cross-int. 115. State specifically what parts of your machine, or what there was in its mode of operation, which differed so substantially from the Hayward machine, that you thought that the patent might be sustained, as the claim then stood.

(Objected to.)

Ans. The specification describes it better than I can. As to the mode of operation in the Hayward machine, the feed was regular; there was a bed on the carriage to correspond with the work to be manufactured, and this was held by dogs; while in the Hale & Goodman machine the work was held in a carriage, being supported by centres, a dial attached to one centre and a clutch to give the number of surfaces to be cut upon the work. The work could not be

performed in the Hale & Goodman machine without the carriage being fed through with irregular motion, and make good work, which could not be done in the Hayward machine.

Cross-int. 116. After you learned that the Springfield machine had been used before you got up your first machine, did you consider that that machine invalidated your patent as the claim then stood?

(Objected to.)

Ans. I think I did not.

Cross-int. 117. Why not?

Ans. I did not think they could make good work on it. There was but one pattern.

Cross-int. 118. If it had been shown to you that it could
360 produce good work, would that have affected your opinion as to its invalidating your patent, as the claim then stood?

(Objected to.)

Ans. I knew it wouldn't produce good work—that is, good pianoforte legs, without making additions to the machine.

Direct resumed:

Int. 1. Please read your answer to the twenty-eighth cross-interrogatory, and state what you mean by the word "block," when you say that "the block was placed so as to bring the upper side of the block in the right place."

Ans. I mean by the first "block," the rest; by the second "block,' the block of wood to be cut.

Int. 2. Please read the thirty-seventh cross-interrogatory and answer, and state what year you refer to in that answer.

Ans. To the year 1844; the remainder of the year after the machine was built; I might have worked a very little longer than that; I couldn't say.

Int. 3. Please read the next to the last clause in your answer to the fifty-sixth cross-interrogatory, and state fully how those drawings were made—on what, by whom, and what they were drawings of, and on how large a scale.

Ans. I wish to correct that a little. I should have said I and Mr. Hale made the drawings. We took a board for the purpose of making our drawings. We intended the scale to be one inch to one foot. We made the drawings of the frame; after that those of the sliding frame to hold the cylinder on which the knives are placed to do the cutting. I don't recollect that we made any other drawings than these. Mr. Hale did the marking.

Cross-resumed:

Cross-int. 1. What did you do?

Ans. I talked with him and we planned together, and I did some of the measuring. I don't recollect using the square and marking. Mr. Hale did this.

ALLEN GOODMAN.

361 *Deposition of Warren Hale.*

JANUARY, 17, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. Warren Hale; age, 53; residence, North Dana, Massachusetts; occupation, piano leg manufacturer.

Int. 2. What was your occupation in the early part of 1844?

Ans. I was a miller at that time.

Int. 3. Were you engaged in that year, previous to July, in manufacturing? and if so, what?

Ans. I was engaged in manufacturing music desks for pianos.

Int. 4. Did you go to Boston about that time to get this work? and if so, what job did you get, if any?

Ans. I did. I took out the veneers and glue sufficient for eight sets of four-square, irregular-shaped, piano legs.

Int. 5. What were these legs called at that time?

Ans. The ogee leg.

Int. 6. Was their outline regular or irregular, was their surface plane or curved, and were they alike or unlike on all sides, and how many sides had they?

Ans. Their outline was irregular; their surface curved; all sides were alike; they had four sides.

Int. 7. From whom did you obtain this contract?

Ans. Mr. Samuel Gilbert.

Int. 8. How did you make the first of these eight sets that were made?

Ans. We built a machine to make them.

Int. 9. Who assisted you in building that machine?

Ans. Mr. Allen Goodman.

Int. 10. Did you attempt to make these legs in any way before using that machine? and if so, how?

Ans. We did. They were sawed in irregular forms, and then we undertook to make the surfaces perfect by filing and other necessary tools to fit the cauls. In doing that we got discouraged and consequently went into the undertaking of making a machine.

Int. 11. What was the common way then in use for making piano legs?

Ans. The common way for making those irregular-shaped legs was entirely by hand, after being gig-sawed.

Int. 12. When was the machine you have mentioned begun, and when finished, as near as you recollect?

362 Ans. In the summer of 1844.

Int. 13. Had you ever before that time seen or heard of any machine or machines for making piano legs? and if so, what? and what kind of legs would it make?

Ans. I never had heard of any machine nor seen any for making irregular form legs.

Int. 14. How do you fix the date when that machine was made?

Ans. From the caveat and also the date of the patent.

Int. 15. Please state how it worked, and whether the legs ordered by Gilbert were made upon it.

Ans. It worked exceedingly well, and those legs were made upon it.

Int. 16. Please look at the machine now shown you, marked "Hale & Goodman, Exhibit 1," and state how it differs, if at all, from the machine you have mentioned.

Ans. The machine was got up in a great hurry, and for an experiment, we being driven by Mr. Gilbert for those legs; we therefore made a very cheap machine, not knowing that the experiment would work. The principle of this machine is the same; the difference, in holding the leg being dogged instead of using the index, the leg being placed in the machine by centre-marks at right angles with each other.

Int. 17. Whose invention was this machine?

Ans. Mr. Allen Goodman and myself.

Int. 18. While the machine was building did you and Mr. Goodman have any talk as to the means for holding and turning the legs? If so, what was said in substance?

Ans. We did. I proposed to put on the index or dial. It was agreed to put that on in the model which we were about to build, and we did so.

Int. 19. Why was the dial not used in the first machine?

Ans. It could not be put on to the first machine, the way we had it, as there was no centre to the head end of the leg.

Int. 20. What was the reason of constructing that machine so that a dial could not be used?

Ans. In the first place, we were desirous of making it as cheap as possible, both of us being in moderate circumstances. And another reason was, that it was very difficult to get iron work done at that time. We went ten miles to do what we were obliged to have done, and we could try the experiment equally well without the dial.

Int. 21. What was the reason of your hurry to get the legs made for Gilbert?

363 Ans. Mr. Gilbert was in a hurry for the legs, and we wanted to accommodate him.

Int. 22. What were the terms of your contract with Mr. Gilbert, how much was he to pay, and what materials was he to furnish?

Ans. The terms were cash. He was to pay, according to the best of my recollection, twelve dollars a set—twelve or fourteen, I won't be positive which. He furnished the veneers and glue, and I the rest.

Int. 23. Who cut these legs in that machine?

Ans. I think Mr. Goodman.

Int. 24. How was the leg held and turned in that machine? Describe it fully.

Ans. It was held by spurs at the head end of the leg, placed in by centre marks at right angles across the head of the leg, and keyed up at the other end. After one side was cut it was taken out and dogged again, repeating the same until the whole four sides were cut

Int. 25. What was required to be done to these legs, if anything after they were cut in this machine, to fit them for veneering?

Ans. If there was any defect in the timber or any slight pieces split off, those places had to be patched, as is the case now with an improved machine.

Int. 26. When was the model made which was afterwards sent to the Patent Office?

Ans. I think the following winter—fall or winter.

Int. 27. Look at the drawings of the reissue patent, and state whether or not they correctly represent this model.

Ans. I should judge they did, according to my best recollection.

Int. 28. How long was it after this model was finished before you made application for a patent, and what was the reason of the delay?

Ans. I've no dates that I could ascertain the exact time by. I should judge, as near as I can recollect, it was some four months; we thinking that we had one year from the time the caveat was filed, and considered it safe, and therefore were not in a hurry in applying for a patent.

Int. 29. Did you and Mr. Goodman have any difference in reference to your respective shares in the patent right? If so, state what it was.

Ans. Mr. Goodman seemed to be a little dissatisfied in accepting of one quarter. Our agreement when we commenced to build the machine was, that he would not charge anything for his time as he formerly had, but that we would go on and finish the machine, and that I might give him a little of it if I had a mind to. I being the principal inventor, as I thought, agreed to give him one-quarter part. This, I think, made some delay in our sending the model away.

364 Int. 30. How long was the machine first built used?

Ans. Some over a year, I think.

Int. 31. How many sets per week could this machine cut?

Ans. I should think from five to ten sets per day, possibly.

Int. 32. Did you yourself ever cut any legs on the first machine?

Ans. I used it a very little when we first started it, in trying the operation of it.

Int. 33. When was the second machine made?

Ans. In the fall of 1845, if I mistake not.

Int. 34. How did this machine differ from the first one?

Ans. The first one was made of wood mostly; of the second one, all the running parts were made of iron, and the swing frame instead of the vertical sliding frame. The centres were attached and the index.

Int. 35. What kind of dial-plate or index was used, and how did it differ, if at all, from that shown in the reissue drawings?

Ans. The dial-plate was made of iron, spaced off into holes, for any desired number of sides to be cut, with a spring clutch entering those holes and holding it at the desired point, similar to this in the drawing.

Int. 36. What was the reason of the change in the arrangement of the frame of the cylinder cutter?

Ans. It was a plan of my own, I thinking I could turn the cutter over out of the way, and that it might be an improvement, but I afterwards found it not to be an improvement.

Int. 37. When was the next machine made?

Ans. The next three machines were made soon after, and sold in New York the following winter or spring.

Int. 38. Did you build a machine which Mr. Allen Goodman afterwards bought? and if so, when, and what became of that machine?

Ans. I did, some time after this, I should judge two or three years after; I don't know what became of it, but think it is in our shop now, one that we use.

Int. 39. Who owned the patent from the time it issued until you sold out to the Stimpsons, and Goodman & Doane?

Ans. I owned one-half of it all the time, and J. E. Stone one-half, part of the time. When sold to Stimpsons & Doane I owned it all.

Int. 40. From whom did Mr. Stone purchase his interest, and when?

Ans. One-quarter from Goodman, the other quarter from me. The conveyance from Goodman was before the patent was granted, if I am not mistaken.

365 Int. 41. When did you sell to the Stimpsons and Goodman & Doane, what did you sell to them, and what price did you receive?

Ans. I should think the bond was made about 1859, which I gave them. Something like two years after that they paid up, and I deeded them my full interest in the patent and real estate. I received seven thousand dollars, and took it all in work, which work I sold myself. The work was taken at nearly one hundred per cent. profit.

Int. 42. To whom did you sell—give their full names—and what proportion of the price did each pay, if it was divided among them?

Ans. Allen Goodman, Hammond Doane, Charles N. and Warren Stimpson. Goodman & Doane were one party, Charles N. and Warren Stimpson the other, each paying three thousand five hundred dollars.

Int. 43. Did that include also the stock, &c.?

Ans. It did not include the stock.

Int. 44. At the time you sold, did you know that any other party was engaged in the business, or have reason to believe that such was the foct, and was using a machine like yours?

Ans. Mr. Stone was a little dissatisfied after he sold to me, and I mistrusted that he might go into the business, although I didn't know anything about it. He being a brother-in-law of mine, I didn't wish to have any contention with him. I can't tell whether Mr. Brooks, of New York, had commenced to infringe at that time or not, but I know he did before they got their deeds from me.

Int. 45. Did you withhold at the time of the sale any information of actual or intended infringement of your patent from the parties who purchased from you?

Ans. No, sir. I was a father to them, felt interested for them all,

and they knew of the infringement as soon as I did. I furnished them with money to carry on business until I went to Philadelphia, or about the time I went there.

Int. 46. When did you go to Philadelphia?

Ans. In November, '51. I removed there with my family.

Int. 47. Please read the forty-first interrogatory and answer, and state whether the date there given is correct or not.

Ans. Oh, no. It was before that, before I went to Philadelphia.

Int. 48. How soon after you sold, if it was afterwards, did you learn that any other party was engaged in the business, and was using a machine like yours? Who was this party, and what negotiation or arrangement was made with the Stimpsons, and Doane and Goodman, as to suing him for it?

Ans. I cannot tell how soon, but it was not very long, as the property was in my hands, and feeling interested for them as well
366 as myself, it was agreed that I should commence a suit against Mr. Brooks then infringing in New York, and I agreed to bear one-fifth of the expenses, furnishing all the money myself, and charging the other parties with the same, excepting my fifth; and should we gain the suit, we were to divide the spoil.

Int. 49. Was this agreement in writing? If so, can you obtain a copy or the original to annex to this deposition?

Ans. It was in writing, I think. I cannot obtain a copy nor the original.

Int. 50. Mr. Charles N. Stimpson has testified that you did not take away the legs to be received by you in payment as fast as you might, and that you refused for some time to say why you hadn't taken them away—finally telling them that Mr. Brooks, of New York, took the trade; that they then told you that they thought they had an exclusive right to the business, and supposed they had bought it, and that it was after frequent complaints of this kind that you consented to commence a suit on Mr. Brooks. Please state how much, if any, of this is true.

Ans. I never was aware of those facts, if they are facts, and never to my knowledge did the legs I was to have accumulate; but to the contrary, many times they had forfeited their bond by not getting them out as fast as was agreed.

Int. 51. (De bene.) He also says that they made complaints to you on account of your not informing them that Brooks was engaged in the business before they made the purchase, and that they thought at the time amongst themselves that the reason why you consented to pay one-fifth of the expense of this suit was, because you had deceived them in not telling them that there were any other parties in the business. Were such complaints made to you? Did you, in fact, so deceive them? and was that the reason why you agreed to pay one-fifth of the expense?

Ans. I recollect no such complaints. I did not so deceive them. The reason why I agreed to pay one-fifth of the expense was, that I was as much interested, and perhaps more, than they were. As they

were all poor I was aware that the property might all come back into my hands.

Int. 52. (De bene.) He also says that you received security for the money you had advanced to commence the suit, and that you conducted the suit under this arrangement until about the time that you went to Philadelphia. That they afterwards took a power of attorney from you to carry on the suit after learning that you had ordered the suit stopped. That he thinks that they at that time repaid you what you had expended in the suit, and that his best recollection is that you were so paid in order to induce you to give the power of attorney, and that you bore no part of the expenses of the suit ultimately. Did you receive such security? Did you give such power of at-
367 torney? Did you ever order that the suit should be stopped? Were you so repaid at this time? Did you refuse to give such power until you were repaid? and was any, and what, part of the expenses of the suit ultimately borne by you?

Ans. As to receiving security, that must be a mistake; I did not receive it. I gave the power of attorney in Philadelphia; I was written to there for it. I never ordered the suit to be stopped. I was repaid all excepting my one-fifth. I did not refuse to give such power until I was repaid. I was not repaid until after the suit was finished. One-fifth of the expenses of the suit was borne by me until I went to Philadelphia; then I told them that they must go on by themselves, as I had got my pay for the real estate and machinery. They afterwards wrote me at Philadelphia (or rather their lawyer did) for a power of attorney, which I sent along immediately. After the suit was decided, they settled up. I did not ultimately bear any part of the expenses nor receive any part of the damages.

Int. 53. How did that suit result, if you know?

Ans. I never knew, only what I saw in the paper.

Int. 54. Did you see the machine which Mr. Brooks was using for the use of which you prosecuted him? If so, state how it differed from the Hale & Goodman machine.

Ans. I saw it once; it had a swing frame that the cutter was hung on, instead of the vertical frame, and it was raised and lowered by the lever instead of a rack and pinion, otherwise it was very similar.

Int. 55. Did that machine have friction rollers, if you recollect? and if not, what did it have in their stead, if anything?

Ans. I think it had a stationary piece half round, which slid on the pattern.

Int. 56. Were you present at the trial of that case?

Ans. I was not.

Int. 57. Did you see the model produced by Mr. Brooks and relied upon by him as a defence in the subsequent equity suit brought against him? If so, please describe it.

Ans. I did not.

Int. 58. Do you know of a machine used in the Springfield armory for cutting gun-stocks, called the forming machine, or the profile machine? If so, please state when you first had knowledge of it.

Ans. I have seen such a machine in Springfield; I am unable to say when first. I never saw it till since '59.

Int. 59. How were the blocks prepared to be planed in the first machine?

Ans. They were sawed with a jigger saw, irregular shape, four-square.

Int. 60. How are they now prepared?

368 Ans. Now prepared in a gauge lathe.

Int. 61. How much practical experience have you in planing piano legs with these machines?

Ans. Very little.

Int. 62. How many years have you been engaged in the manufacture of piano legs with these machines?

Ans. Some eight years in all.

Int. 63. How long, in your judgment, will it take an ordinarily good mechanic to learn to plane legs upon the Dana machine?

Ans. There is only one thing to be learnt to run the machine over and over again. I consider it requires a better mechanic to keep the machine in order by far than the mere running the machine; any good mechanic will keep the machine in order, and sit down to the machine and make good work the first time trying, as has been the case with many of our workmen.

Int. 64. Is it the practice when you employ a new hand to run the machine, to allow him a certain time to learn its operation? or is he paid regularly from the first?

Ans. It never has been our practice to give him any time to learn, but always paid him from the first.

Int. 65. Do you pay such workmen by the day, or by the number of legs cut?

Ans. We have done it in both ways; that job is now let by the piece.

Int. 66. When did you next become an owner in the patent, after your sale to the Stimpsons and Goodman and Doane?

Ans. May, 1859.

Int. 67. What property did you then buy, and from whom?

Ans. I bought the real estate, all the machinery, and tools from the firm of Johnson, Stimpson & Co., with the good will and business of the same.

Int. 68. At the time of that sale, what was your opinion as to the rights of that firm to use the patented machines during the extended term of the patent? And if you had previously taken any legal advice on that question, state what the advice was and who gave it.

Ans. I was under the impression it would all belong to us again after the extension. I never took any legal advice. I read it in a pamphlet distributed by Munn & Co.

Int. 69. What talk upon the subject did you have with any of the members of the firm of Johnson, Stimpson & Co.?—state as fully as you recollect—during the negotiations for the sale?

Ans. Not any that I recollect of.

369 Int. 70. Mr. Charles N. Stimpson testifies that there was

talk in regard to the extension between himself and the other members of the firm and yourself, most of it at their office, but some of it in the street; that you said that you had got your patent extended, or was about doing so, and that they would have no further right to it after it expired; that you proposed to sell it to them, he thinks, for ten thousand dollars, that you made a proposition to put the patent right against their shop's work and business and bid for choice; please state how much of this you recollect.

Ans. It's very true there was talk in regard to the extension; there was an offer also made to sell the extension to them for ten thousand dollars, which they refused. In regard to anything being mentioned by me as to their having no right to use the machines they were then running, I think that must be a grand mistake, as I've no recollection of anything of the kind. In the matter of putting the patent against the shop and business, I am sure there was nothing of that kind. I might have said, which I rather think I did, that I would put it in at ten thousand dollars and go in company with them.

Int. 71. What price did you pay for what property you bought from Johnson, Stimpson & Co.?

Ans. Fifteen thousand dollars for the real estate, water-power, shops, tools, and machinery, including the good will, and about ten thousand dollars worth of stock, which was counted off to me.

Int. 72. Did you meet Mr. Goodman shortly before this in New York? and if so, for what purpose?

Ans. I did, for the purpose of getting an extension of our patent or taking steps for doing so.

Int. 73. How long after the sale was made to you before Mr. Goodman went into business with you?

Ans. The following fall.

Int. 74. At the time of the sale had you entered into negotiations with Mr. Goodman to go into partnership with you?

Ans. There was such an understanding, in case we could agree.

Int. 75. Mr. Charles N. Stimpson testifies that in July or August after the sale, you spoke to him about going into business with you in the street, at Dana, he thinks, and that you then agreed to meet in New York, and met according to agreement. Please state what you recollect about this.

Ans. Mr. Stimpson is mistaken in regard to my speaking to him. He was the one that proposed the question—wanting to come into the concern again. He is also mistaken in regard to making an agreement to meet in New York, as after I returned to Philadelphia I received a letter from him requesting me to come over to New York. The rea-
370 sons he gave were, that he thought I had better go among the customers and he would accompany me round, give me an introduction, &c., which he did to some extent. There he again asked the privilege to come into the concern.

Int. 76. What reply did you make to this request?

Ans. I gave him no definite answer either way.

Int. 77. He also says that he spoke to you of a proposal made to him by Mr. Decker about manufacturing billiard tables, and that you

told him to hold on till you and he had got through your negotiations. What do you recollect of this?

Ans. I am sorry to say that there again is a mistake; he did mention to me that Mr. Decker wished him to take hold with him, but I have no recollection that I told him to hold on.

Int. 78. Mr. Charles N. Stimpson testifies that Mr. Johnson came to see you, and said that you wanted him to come and see him about taking an interest in the copartnership they were about getting up; that you had concluded to leave Mr. Goodman out of the concern and put in Mr. Joseph Fales, Lorenzo Hale, George T. Johnson, and himself and yourself. Did you ever send such a message to Mr. Stimpson, by Mr. Johnson? If not, please state fully how Mr. Charles N. Stimpson became one of the parties to the Westfield purchase.

Ans. I do not remember sending any such message by Mr. Johnson. I cannot remember who first introduced the subject of buying the Westfield property to me. I am sure I didn't get it up myself, but some one proposed it, which I readily fell in with, and proposed the members to compose the company. Soon after this we had a meeting; I am unable to say now how many were present, but most of those that had been proposed were, and Mr. Stimpson was there at the first meeting.

Int. 79. Who were the proposed parties? Give the names of all you recollect.

Ans. Warren and C. N. Stimpson, Joseph Fales, Allen Goodman, Lorenzo Hale, George T. Johnson, and myself, and Wm. N. Oaks. I think he was proposed.

Int. 80. Were you present at the first meeting held by those proposed partners? If so, please state where and when it was held, as nearly as you recollect, and who were present.

Ans. I was present at that meeting; it was held in my office in North Dana in the month of September, 1859, I think; the exact date I can't tell; Mr. C. N. Stimpson was there, Mr. Oaks, Mr. Geo. T. Johnson, I believe, and Mr. Lorenzo Hale.

Int. 81. Please state the general nature of the conversation
371 which took place there, and whether any agreement was there made as to the persons who should carry on the new business, or as to the name under which, or the manner in which, or the place or places at which, it should be carried on.

Ans. There was no agreement there made; we merely talked the matter over, some proposing one thing, and some another; Mr. C. N. Stimpson, I think, proposed to have two distinct concerns, not known in the market to be one concern; others said that would be using deception, which our customers would soon find out, and which would then be a damage to us, and that the plan of carrying on two concerns separate, under two names, would take an extra man to go into the market. It was proposed to work up the stock at Westfield, in case we could buy the property there, and then sell the real estate there and move the machinery home to North Dana; there was also a committee chosen to proceed to Westfield, and buy the property there; I think it was proposed that Mr. C. N. Stimpson should be one

to carry on the business at Westfield; I don't know as anything more was said as to who should go to the different places; that was for after consideration, as I understood it. The committee chosen to purchase the property were Charles N. Stimpson, Joseph Fales, and Wm. N. Oaks.

Adjourned to 18th Jan., at 10 a. m.

JANUARY 18, 10 a. m.

(Witness desires to make a correction in his answer to the forty-first interrogatory, and says: The date I intended to give therein, and thought I did give, was 1849, instead of 1859.)

Int. 82. Did the committee appointed go to Westfield accordingly, to make the purchase? and if so, how soon after the meeting?

Ans. They did go, I think the same day.

Int. 83. Mr. Charles N. Stimpson testifies that he took you into his buggy and told you of a proposal made to him by Mr. Oaks of buying out the Westfield concern and controlling the whole. Do you recollect this, and do you know whether you had had any previous intimation of it?

Ans. I do recollect riding with Mr. Stimpson, but cannot tell whether he was the first to tell me of this proposal, but presume he was.

Int. 84. At the first meeting, about which you have testified, was Mr. Goodman's name proposed as one of the parties? and if so, was any objection made to his coming in?

Ans. His name was proposed and no objection made.

Int. 85. Upon the return of that committee from Westfield did another meeting take place, how soon after, and where?

Ans. There was a meeting of several of the members at
372 Athol, I think, the next Saturday after the first meeting; there was no regular meeting on their return till the next Monday, if I am not mistaken.

Int. 86. Please state what occurred at the meeting at Athol, and what agreement, if any, was made, what was proposed, and what decided, if anything?

Ans. It was talked before going to Athol of the propriety of forming a joint stock company; come to make inquiry after going to Athol and reading the statutes, we found that there would be too much machinery necessary, or too many forms to comply with the law, and we abandoned the idea; nothing more was done.

Int. 87. Was that meeting adjourned? and if so, to what time and place?

Ans. I think we agreed to meet the next Monday morning at my office, for the purpose of forming our company.

Int. 88. Who were present on Monday morning at that adjourned meeting?

Ans. Mr. George T. Johnson, Charles N. and Warren Stimpson, Joseph Fales, Allen Goodman, Lorenzo Hale, and myself, and S. F. Lindsay; I think that was all.

Int. 89. Where was Mr. William N. Oaks?

Ans. He was left at Westfield, as I understood, to see to the property there which our committee had previously bought.

Int. 90. Was this meeting organized? If so, how?

Ans. It was, by choosing Joseph Fales chairman, and George T. Johnson clerk.

Int. 91. Were any records made? and if so, where are they now?

Ans. Mr. Johnson made records of the meeting; I do not know where they are now, as I never was in possession of them.

Int. 92. Will you make search for these records, and annex them them to this deposition, if you find them?

Ans. I will.

Int. 93. Was there any chairman, clerk, voting, or records at any previous meeting of the associates?

Ans. There was not.

Int. 94. Was anything said at this meeting on Monday, by way of objection to Mr. Lindsay's coming into the concern? If so, what and by whom?

Ans. There was no objection made.

Int. 95. Who was Mr. Lindsay?

Ans. He was at that time one of the selectmen of the town, and had for several years previous been in the old company, Johnson, Stimpson & Co.

Int. 96. What sort of a man was he as to intelligence, character, and business capacity?

373 Ans. He then had the name of being one of our first men for all those qualities.

Int. 97. Was any personal objection to Mr. Lindsay suggested by anybody, in or out of the meeting, to your knowledge?

Ans. Not to my knowledge; it was hinted after the meeting that Mr. C. N. Stimpson was somewhat dissatisfied.

Int. 98. State fully what was proposed, discussed, and voted at that meeting on Monday.

Ans. There was talk in regard to the establishments at Dana and Westfield, by some, as to making two distinct concerns, which was objected to by others; we finally came to the conclusion to go on and name our company, which was done by voting by ballot; the result of our voting was to call its name Warren, Hale & Company.

Int. 99. Were any steps taken at that meeting as to raising funds for the purchase of the Westfield property? If so, state fully.

Ans. There was a four months' note made for $1,000; Warren, Hale & Co. were on the note, either as signers or indorsers; I don't recollect which; I think Joseph Fales and C. N. Stimpson were also on it.

Int. 100. What was said or done at that meeting, if anything, in regard to Mr. Lindsay's joining the concern, and the share he was to have?

Ans. I don't recollect as anything was said in reference to that.

Int. 101. Was Mr. Lindsay present during the whole meeting, and did he take part in the voting?

Ans. He was present and took part.

Int. 102. Was anything said at that meeting by any one as to any proposition there made having been already settled by agreement, and no longer open to vote?

Ans. There was nothing of that kind said.

Int. 103. Was any objection to, or protest against, any of the proceedings made by any one?

Ans. Not in the least.

Int. 104. How was that meeting terminated, by adjournment or otherwise?

Ans. If I mistake not, it was adjourned to meet that evening to finish up.

Int. 105. Why was it so adjourned?

Ans. To allow Mr. George T. Johnson to go to the bank, that day being the directors' day, to get the note discounted; as it was then near twelve o'clock, he could barely have time to get to the bank at Athol before it closed.

Int. 106. Was the meeting held, according to adjournment, that evening? If so, who were present and what was done?

Ans. There was a meeting; neither of the Stimpsons being
374 there, there was nothing done; I am not sure, but I think most of the other members were there.

Int. 107. When did you next see Mr. Charles N. Stimpson?

Ans. I am unable to say; I might have seen him pass in his carriage, but didn't see him to have any conversation for a long time.

Int. 108. Was the meeting last referred to the last meeting of the associates? If not, state who were present and what was done at the next meeting?

Ans. There was no regular meeting after that; the remaining members were frequently together wondering what had become of the Stimpsons.

Int. 109. Did you go to New York with Mr. George T. Johnson from Dana? If so, for what purpose did you go, and when did you leave Dana? Give the day of the week and time of day, and state how you fix the time and day.

Ans. I did go, for the purpose of soliciting orders; I left Dana Friday morning, September 30th, 1859, at an early hour, before light n the morning; we had to go six miles to take a stage coach which eft about six o'clock; I fix the time from the fact of my stopping at Lovejoy's Hotel, and my name is registered there on that day.

Int. 110. When you returned to Dana from New York, did you hear anything of a visit of Mr. C. N. Stimpson and Mr. Oaks to Dana during your absence?

Ans. I did hear that they had been there during my absence.

Int. 111. When you and Mr. Johnson went to New York, did you, or did he, to your knowledge, know that Mr. Stimpson or Mr. Oaks, or anybody in their interest were in Dana or were expected there?

Ans. I knew nothing of the kind, nor did I expect any such thing, and presume Mr. Johnson did not.

Int. 112. Did you, or did Mr. Johnson, to your knowledge, at the time of going to New York, or at any time before, have any idea or

purpose of avoiding any person or proposition in regard to this leg machine business?

Ans. Not in the least; but I felt hurt that things could not go on as was intended at the start.

Int. 113. Did Mr. Chas. N. Stimpson, previously to your going to New York, or at any other time, ever make to you, or to any one else to your knowledge, any proposition to give up his interest in the Westfield purchase?

Ans. He never did.

Int. 114. Did he ever intimate to you, or to any one else to your knowledge, his willingness to do so?

Ans. He did not.

Int. 115. Was anything more ever done with reference to
375 carrying out the proposed arrangement? and if so, what? I mean after the last meeting you have spoken of.

Ans. There was. Mr. Johnson and Mr. Fales were sent to Westfield for the purpose of making some arrangement, but could not succeed.

Int. 116. Mr. Chas. N. Stimpson speaks of a bond given by him to you to keep out of the business. Please state why and when this bond was given.

Ans. The bond was given for my protection, as I supposed, about the 18th of May, 1859.

Int. 117. What transaction was this bond a part of?

Ans. It was a part of the transaction of my buying the property of Johnson, Stimpson & Co.

Int. 118. Was the Westfield property finally purchased? If so, by whom?

Ans. It was, by our committee before named.

Int. 119. Who ran the Westfield property after the termination of the negotiations between the proposed partners?

Ans. Warren and C. N. Stimpson and Wm. N. Oaks.

Int. 120. What arrangement did you make and when for carrying on the business at Dana? Give the name of the firm, if there was one, and the names of the partners?

Ans. Soon after the Westfield arrangement fell through, there was an arrangement made and a company formed. The name of the firm was Warren Hale & Co., its members being Allen Goodman, Lorenzo Hale, and myself.

Int. 121. Shortly after Stimpson, Oaks & Co. began working at Westfield, and how soon after, did they commence negotiations with Warren Hale & Co., and what were those negotiations, if any?

Ans. They commenced negotiations some time in the winter with Mr. Goodman, as I was informed, offering great inducements to compromise, and not run one another in the market; offering Mr. Goodman to furnish customers to buy all the pianos that we could get hold of, and promising to have a uniform list of prices which would be beneficial to each party, as they said.

Int. 122. What steps, if any, did you take shortly after Stimpson, Oaks & Co. began to run the Westfield concern, and how soon after,

to prevent them from manufacturing legs, and were such proceedings grounded upon the bond of Charles N. Stimpson, above referred to, or upon your patent, or both? State fully and particularly.

(Objected to.)

Ans. On the November election day of 1859 I went to Barre, to consult counsel in regard to the bond. The counsel was unable to answer at that time, but said he would look it up and write us, which he did some little time after. We also built the two models,
376 "Hale & Goodman, Exhibit 1," and "Stimpson, H. L. H, U. S. com.," which we carried to New York, and took advice of counsel from Mr. Beach, of the "Scientific American." His advice was that the "Stimpson, H. L. H.," model was precisely the same in principle with the original "Hale & Goodman, Exhibit 1." Soon after that I went to see Mr. Keller, and made inquiry of him in regard to the bond, which he said was good. I then went home, waiting for an answer from the Barre counsel, Mr. Brimblecomb, whose answer was unfavorable. The negotiations continued between Stimpson, Oaks & Co. and Goodman, till some time in the winter, when we made a visit to Westfield, and there talked over the matter, not coming to any conclusion. Just as we were leaving I asked Mr. C. N. Stimpson what he proposed to do with the bond, as there had been nothing said about that before. His answer was, that they would pay it when they were obliged to. He then expressed great fear of being sued, and I concluded they had given up the idea of making any negotiations. We afterwards made an agreement to meet at Greenfield, for the purpose of making those negotiations, which we accordingly did.

Int. 123. What was the result of the meeting at Greenfield? If any agreement was made, state whether it was in writing or not, and if any verbal agreement was made, state what it was?

Ans. There was an agreement made in writing, and also a verbal agreement in reference to buying out Lyman Wheeler's property in North Dana, including a leg machine built on the Hale & Goodman plan, which he was then running in Orange, Massachusetts, the purpose of which was to get him out of the business of manufacturing legs, he being then a competitor. This agreement was that they furnish one pianoforte, which was then at Winchester, wholesale price $245. They also offered to take the machine referred to. In such case they would give us a melodeon, wholesale price $112 or $100, cash.

Int. 124. Look at the agreement marked "B" annexed to the bill of complaint, and say whether that was the written agreement referred to in your last answer?

Ans. It is.

Int. 125. Why did you not bring suit against Stimpson, Oaks & Co upon your patent immediately after the advice you received from the Scientific American office?

Ans. One difficulty was, we were aware that the claim to our patent was not as it should be, therefore we did not feel disposed to commence a suit until we had obtained a reissue. After this the re-

gotiations at Greenfield were made, which gave them a right to run for two years.

Int. 126. Why was this right to run for two years given them?

Ans. We were not then ready to commence a suit upon the
377 patent; and learning from Mr. Brimblecom that the bond was not binding, and thinking that within the two years we should be better able to carry on a suit, and in the meantime that we could get our patent reissued, we concluded to give them the two years right.

Int. 127. When and how did you first learn that the claim in your patent was not as it should be?

Ans. Some time in May, 1859, Mr. Goodman gave me the information that his opinion was that it should be surrendered and reissued, because, although he considered it valid as it then was, yet by surrendering it and getting a reissue we might make it a valuable patent.

Int. 128. Did you agree at Greenfield to divide Wheeler's property, giving Stimpson, Oaks & Co. the leg machine, and retaining the rest yourselves?

Ans. We did not.

Int. 129. Did you accept their offer to give them the leg machine provided they would pay $100, or give you the melodeon?

Ans. We did not—we never had any such intention.

Int. 130. Please look at the letter referred to in the seventeenth direct interrogatory and answer of Wm. N. Oaks, and state who wrote that letter, and what agreement is referred to in it.

Ans. I wrote that letter. It refers to the verbal agreement made at Greenfield

Int. 131. Was Wheeler bought out accordingly, and what was paid him, and what proportion of the expense did Stimpson, Oaks & Co. bear?

Ans. We did buy him out, and paid him in two pianofortes, called $500, and a hundred sets of melodeon legs, making, $500 more, amounting in all to $1,000. Messrs. Stimpson, Oaks & Co. bore no part of the expense.

Int. 132. Mr. Wheeler testifies that you asked him if he thought he had a right to run the machine, as you had got your patent renewed; that he replied that he thought he had, but if he hadn't that he would stop if you said so, "but you understand this much, that I shall make those legs, because I came honestly into the market, unless you buy my machine and I agree not to make them." What was your opinion at that time, as to Wheeler's right to run that machine, and say, if you know, how he obtained that right. State also how much of the above conversation you had with Mr. Wheeler.

(Objected to.)

Ans. I deny ever having had that conversation with Mr. Wheeler. My opinion always had been that he had no right to run the machine.

Int. 133. What was the value of the property you purchased of Mr. Wheeler? How much less than the price you paid, if any?

And if it was less, state what your reasons were for paying that price.

378 Ans. The value of the real estate was about five hundred dollars. The machine cost about one hundred dollars. The reason for paying more was to get him out of the market as a competitor; also, the promise from Messrs. Stimpson, Oaks & Co. to bear of the above burden what they called two hundred and forty-five dollars, being a pianoforte at Winchester.

Int. 134. Was there an agreement made at this time with Mr. Wheeler, and was it verbal or in writing?

Ans. There was an agreement made in writing, and also a verbal agreement, giving our consent to him to manufacture cone legs, if he wished to do so.

Int. 135. Did you give him the right to use the machine you bought, or one on the same plan, to make these cone legs? and what did he say, if anything, as to building a machine of his own, if you refused to leave him that machine?

Ans. We gave him no such right, unless it was to finish up what piano legs he had begun. He said nothing about building a machine of his own.

Int. 136. What are cone legs, and how were they then made?

Ans. A cone leg has a tapering shaft in the centre with turned caps and feet. They were then made in various ways, sometimes by passing the shaft past a circular saw, and sometimes past a lead planer; the caps and feet were turned in a lathe; the shaft being veneered, the caps and feet were grained in imitation.

Int. 137. Did you ever see the machines described in Mr. Wheeler's answer to the sixty-second direct interrogatory?

Ans. No, sir; I never did.

Int. 138. After the agreement annexed to the bill and marked "B" was made, what was your course respecting underselling Stimpson, Oaks & Co. in the market?

Ans. Our course was not to undersell them.

Int. 139. Do you know what their course was in this respect?

Ans. Not in every case. Chickering & Sons frequently told me that they bought a ten-square leg as cheap of them as they did the eight-square leg from us.

Int. 140. Will you state whether you ever reduced your price to any person for the purpose of securing contracts or orders which would otherwise have gone to the Westfield company.

Ans. We did not.

Int. 141. Referring to the agreement in writing of March 7th, 1860, made at Greenfield, (Exhibit B annexed to the bill,) will you state whether any particular machine was referred to in, or was the subject-matter of, the clause in said agreement authorizing

379 Stimpson, Oaks & Co., to use the improvement patented to Hale & Goodman, and if so, what it was? State the circumstances which led to the introduction of that clause into the agreement.

Ans. There was no particular machine referred to, as I understood

it, different from the one they were then using. It was at their suggestion that that clause was put in, and I had no idea of their wanting any other machine at the time these writings were made than the one they were then using.

Int. 142. Mr. Chas. N. Stimpson has testified that the machine he then had, meaning the Oaks machine, could not do the work fast enough. How many sets per week, in your judgment, could be cut upon the Oaks machine, and how many can be cut upon the Dana machine?

Ans. I should judge from twenty-five to thirty sets per day upon the Oaks machine, and about that amount is a fair day's work on the Dana machine.

Int. 143. What was your reason for introducing that clause into the agreement? what right did you intend thereby to convey to Stimpson, Oaks & Co.?

Ans. To comply with their wishes, intending it to apply to the machine they were then using.

Int. 144. Did Mr. Stimpson, in your hearing, ask the lawyer who drew that instrument any question as to the effect of that clause? If so, state what it was, and the reply.

Ans. He did so ask the lawyer. The purport of the question was, would it affect the rights of the parties after this contract should run out. His answer was that it would not.

Int. 145. State whether you then understood or had any reason to believe, or did believe, that either of the Stimpsons or Mr. Oaks did not understand that this clause referred to the Oaks machine they then had in use.

Ans. I've no doubt that they so understood it.

Int. 146. Mr. Charles N. Stimpson testifies that he supposed that the reason why the Westfield property and the Oaks machine was bought was that the Oaks machine had a right to run and to get it out of the way. Please state whether the price paid for the Westfield property was large or not, and give the real reason why it was purchased.

Ans. The price paid was not as large as the price paid for the North Dana concern. I should consider it a very fair price. The property was not purchased because we thought the machine had a right to run, for I never thought so, but the object of the purchase of said property, so far as I was concerned, was to consolidate the business of the two, as we should then have nearly the whole control of the market, thus saving the great expense of a suit.

Int. 147. (De bene.) Will you refer to the clause in the agreement relating to the rendering of accounts by the respective par-
380 ties, and state whether that stipulation was carried into effect; and if so, for how long, and if the parties ceased to carry it into effect, state the circumstances fully which led to such cessation.

Ans. It was carried into effect for a few months. Accounts were rendered monthly instead of quarterly. About that time Mr. Charles N. Stimpson came to Dana, inquiring about the Wheeler machine, if

he could have it. I told him no, we never intended to let him have it. Then there were some words between us in regard to this contract, which I told him I did not consider worth anything at all to us. He was considerably stirred up, and ever after that refused to render any account. We afterwards sent Mr. Allen Goodman and J. W. Goodman with our books to Westfield, for the purpose of making the settlement referred to in the agreement—the annual settlement. They refused to do anything about it, saying that their father at North Dana would attend to that, which he never did nor ever would.

Int. 148. What were the reasons you assigned to Mr. Stimpson why you did not consider the contract worth anything at all to you?

Ans. I don't recollect that I gave him my reasons, as he was in the office but a very short time.

Int. 149. What were your reasons in fact?

Ans. My opinion was, that the making of those writings at Greenfield was solely for the purpose of saving themselves from the bond which they had given me, which bond was released at the same time by Exhibit C, annexed to the bill of complaint. And my further reasons were that they desired by this agreement to keep us quiet in regard to commencing a suit; and I saw that they did not intend to live up to the agreement on their part.

Int. 150. How had they violated the agreement, if at all?

Ans. We had written to them to send us an order for the piano, and also for the balance due us of the one-half of the expenses of getting the extension, which they had agreed to pay. I don't know that there were any other violations then of the agreement.

Int. 151. What passed between you and Mr. Stimpson at this time as to his having the Wheeler machine? Did he insist upon it as a right, or did he come to see if he could purchase it?

Ans. He did not say that he had any right to it, but merely asked if he could have it. My answer was that we would not not sell it for five hundred dollars. He then said, "You consider it valuable."

Int. 152. Will you refer to the stipulation in the agreement relative to making the product of the two parties to the agreement equal, and state what was done under that clause.

Ans. They did write to us once or twice, saying that we
381 could trade with A. W. Ladd & Co. for pianos by giving and
and selling them. They may have referred us to some others whom I do not now remember. My opinion at the time was that this was trade that they did not want themselves.

Int. 153. What was the agreement made at Greenfield as to their paying a part of the expenses of the extension of the Hale & Goodman patent, and how far was it complied with on their part?

Ans. They agreed to pay one-half of that expense. I see by letter dated March 9th, 1860, from Warren Hale & Co. to Stimpson, Oaks & Co. that the whole expense was $467 35. They paid us at Greenfield $150, leaving balance due us of $83 60. That never was paid.

Adjourned to 19th inst., at 10 a. m.

JANUARY 19*th*, 1865,

Int. 154. Please give the cost of the materials and labor necessary for the manufacture of one set of piano legs, and if the different patterns vary in this respect, state what pattern or patterns you refer to, and point it out in Exhibit "Frost, N. A. P., ex'r," and give the items, if possible.

Ans. The cost of manufacturing No. 8 on Exhibit "Frost, N. A. P., ex'r," on our list of prices, is as follows:

Sixty feet of lumber, $12 per M	$0 72
Cutting lumber and putting in dry-house	10
Drying	10
Glue used	20
Making one set ready to veneer	65
Screw pins	04
Use of shop and tools	19
	2 00

The cost of veneering No. 8:

32 feet of veneers, at 5 c. per foot	$1 60
Getting out veneers	17
Laying	50
Use of cauls and hand-screws	10
Scraping per set	39
Finishing	34
Glue	30
Boxing	10
	3 50

No. 10 costs about a half dollar less, as near as I can judge, and Nos. 2 and 5 cost thirty-six cents more per set than the above estimate.

382 Int. 155. What was the cost per set of such legs between 1853 and 1857?

Ans. I cannot tell, as I was entirely out of the business at that time. Probably something less.

Int. 156. What were Mr. Wheeler's circumstances in the year '53, and what have they been since that time, so far as you know?

Ans. He was at that time in very comfortable circumstances. Since that time it has been reported that he was worth seven or eight thousand dollars.

Int. 157. How much capital did you have when you commenced the leg business?

Ans. I had no ready money, merely a mill and water privilege partly paid for, and a little real estate belonging to my wife.

Int. 158. What would be the capital necessary to build a machine and start the leg business to the amount of say twenty-five sets a week, supposing shop room and power provided?

Ans. I should judge one thousand dollars would start it very comortably.

Int. 159. Mr. Wheeler has testified that he took a contract with Mr. Goodman to make certain legs at $2 50 per set, not less than twenty-five sets per week, the legs to be furnished by him ready for veneering. How much capital would he have required to veneer the legs himself?

Ans. According to our list of prices his outlay would be $87 50 per week more to finish them ready for market. Should he get his pay every week that amount of capital would be sufficient, but I should judge that $500 capital would be enough any way.

Int. 160. Please read Mr. Rufus Powers's answer to the twenty-second direct interrogatory, and state what agreement, if any, was made with him.

Ans. There was an agreement or a talk with Mr. Powers that in case he had a machine similar to ours, he should have the right to do all the round work, which was all he asked. We afterwards, before making application for the patent, went to see Mr. Powers for the purpose of seeing his machine, if he had any. Our request to see his machine was refused. He would not let us into his shop; we concluded that he had nothing, from the fact of his so refusing us, and therefore went ahead and made application for our patent, leaving a writing with Mr. J. E. Stone, saying that we were ready to give him the round work as we had agreed or talked about.

Int. 161. Was he to do anything, and if so, what, before this writing should be delivered to him?

Ans. I do not recollect that he was, as we cared nothing for the round work, and did not consider it infringed on our business at all.

Int. 162. Did Powers ever in fact show you any machine
383 before the date of your patent, and did you at that time believe that he had a machine such as he pretended to have?

Ans. He never showed me any machine, neither did I believe he had such a machine.

Int. 163. Please look at Exhibit "Powers No. 2; H. F. S., com.," and state whether you ever saw the machine of which that is a model, and how it differed, if at all, from the exhibit?

Ans. I saw a similar machine a few months ago; there were some slight differences, however, which are as follows: what he calls the dial plate, *i. e.*, the holes in the wood work, were only five on the machine, the three top holes in the model not being in the machine, the head-piece of the carriage in the machine being shaped differently from that in the model; the top of the head-piece was very nearly straight, and very nearly on a level with the sides of the carriage; the spur in the crank in the model was not in the machine; there were two holes drilled through this crank, and two stationary pins on the head of the carriage in a horizontal line, so that the outer hole in the crank would fit on them, so that when the crank was shifted from one pin to the other it would turn the work half around, and there hold it for the purpose, as I suppose, of planing the flat

sides of spokes, for which purpose he claims that he built the machine.

Int. 164. In making a spoke in that way what kind of knives would he use upon the cylinder?

Ans. The knives would, necessarily, have to be concave.

Int. 165. Would it be possible, in the machine you saw, to cut eight-sided work without unclamping and reclamping it?

Ans. It would not.

Int. 166. Did you see that machine more than once? If so, state how often, and when, and who were with you on each occasion.

Ans. I saw it a second time a week last Monday; Mr. Allen Good-Goodman, A. Amsden, John W. Goodman, and Mr. Ira Witt were present at this time; the first time I saw it Mr. Allen Goodman and A. Amsden were with me.

Int. 167. When you saw the machine a second time were any of the parts different to what they were when you first saw it? If so, state what.

Ans. The centre arbor, when I first saw the machine, was flattened at the spur end, and one of the outside spurs broken off; when I saw it the second time there was another spur on the arbor, both spurs now being perfect.

Int. 168. Who else were present besides those who went with you when you saw the machine?

Ans. The first time Mr. Powers and his son; the second
384 time Mr. Powers, Mr. Z. W. Brown, and another gentleman whose name I do not know.

Int. 169. Before your first machine was built had you ever seen or heard of any machine for cutting profiles or making polygons of any kind?

Ans. The only machine I know anything about was a machine for sawing cones.

Int. 170. How did the workmanship and material of your first machine compare with the second as to quality and fitness?

Ans. The workmanship of the second machine was much better; all the running parts were made of iron, whereas those of the first were mostly of wood.

Int. 171. How much more work could be done on the second machine than on the first?

Ans. I should judge three times more, and do the work much better.

Int. 172. How many hands did it take to run the first machine, and how many the second?

Ans. One man to each.

Int. 173. Please look at the exhibits now shown you, Powers 4, 5, and 6, and state whether one caul would fit all the eight sides of any one of those exhibits.

Ans. I should think not very well.

Int. 174. Please read the answers of Mr. Wm. N. Oaks to the sixty-eighth and sixty-ninth direct interrogatories, and state what you recollect of the conversation there referred to.

Ans. I met Mr. Oaks at Springfield with the intention of making him a witness for us as to the verbal agreement made at Greenfield, and also to learn what he remembered about that agreement, and what his relations were with the Stimpsons; I never made the remark that I would offset the $100 against the machine.

Int. 175. Please read Mr. Albert Bosworth's answer to the sixteenth and seventeenth direct interrogatories, and state what you recollect of the conversation there referred to.

Ans. I think I asked him if he didn't think it was an infringement, and that his answer was "no;" I don't remember saying those things against the Dana company, as I had nothing against them, and it doesn't look hardly reasonable that I should have said them; I was friendly with them in all respects at that time; I did introduce Mr. Bosworth to one firm in Philadelphia, (C. Myers,) but remember of no other.

Int. 176. Mr. Warren Stimpson testifies that you and Mr. C. N. Stimpson had a conversation with him in front of the shop in
385 Dana shortly before the purchase of the Westfield property, in which you requested him to take an interest, and told him that there were to be two names, one for the Westfield concern and one for the Dana concern; that Oaks, Charles N. Stimpson, and Fales were talked of to carry on the Westfield concern, the rest of the members to carry on the Dana concern; state whether you had any conversation at that time and place with Warren Stimpson, and if so, what you said.

Ans. I have one great reason for thinking that a mistake, which is this: I was always opposed from the beginning to having two distinct companies; I remember having no such conversation with them; another thing is that there was no time after the proposal to buy the Westfield property to allow such conversation to have taken place, as the committee went off directly.

Int. 177. Did you ever at any time say to any one, or believe, that the Oaks machine was not an infringement of the Hale & Goodman patent?

Ans. Never to my recollection; on the contrary, I always believed it to be an infringement.

Adjourned.

JANUARY 25*th*, 1865.

Cross-examination:

Cross-int. 1. At the time when you got up your first machine did you know of the existence of the Hayward machine, or any similar machine for forming or planing irregular forms?

Ans. I did not.

Cross-int. 2. How soon after that did you first know of the Hayward machine?

Ans. I couldn't tell.

Cross-int. 3. Can't you tell about what time it was within a year or two?

Ans. As near as I can recollect it was about the time the lawsuit with Brooks was pending.

Cross-int. 4. Before you learned of that machine did you believe your machine to be the first which had been invented for planing or forming irregular surfaces of that kind, *i. e.*, surfaces which were irregular in their longitudinal direction, and straight in the direction at right angles thereto?

Ans. I did think so.

Cross-int. 5. You say you were acquainted with the manufacture of cone legs before you got up your first machine; how long before had you been acquainted with it, and where?

Ans. Several years before, in Boston.

386 Cross-int. 6. Will you describe the machine, and the manner of using it in which the several sides of those cone legs were produced or formed?

Ans. My best recollection is that the block was placed in a carriage and passed by a circular saw, and afterwards the several sides were planed off with a jointer by hand.

Cross-int. 7. Will you describe how the block was placed in the carriage?

Ans. On centres.

Cross-int. 8. How was it turned to form the several sides?

Ans. By hand.

Cross-int. 9. How was it fastened in the required positions, and how released in order to be turned?

Ans. It was fastened by an index held by a spring clutch entering holes, and released by the same.

Cross-int. 10. How was the index attached to the block of wood?

Ans. This index that I have reference to I made myself excepting the iron work, which was a hoop put on to a hardwood circle, in which wood were two spurs which we drove on to the leg, or rather on to the block.

Cross-int. 11. Have you seen that index recently? If so, where?

Ans. I had a glimpse of one similar—I don't know that it's the same—in Mr. Parker's office.

Cross-int. 12. Do you mean the one testified to by Mr. Church?

Ans. I don't know; I suppose he testified to that.

Cross-int. 13. Have you any doubt about its being the same index which you made?

Ans. I couldn't tell anything about that; the one that I made was made for T. Gilbert & Co.

Cross-int. 14. In your answer to the twentieth direct interrogatory, in speaking of your reasons for not using an index for the first machine you got up, you say as follows: "It was very difficult to get iron work done; we went ten miles to do what we were obliged to have done, and we could try the experiment equally well without the dial;" what experiment do you refer to?

Ans. The experiment of planing a side of an irregular-formed piano leg.

Cross-int. 15. You say in answer to the twenty-ninth interrogatory

that you thought you were the principal inventor; will you state the circumstances under which the invention was made, and what parts of it you thought you invented, and what parts you thought Mr. Goodman did?

Ans. We undertook to make eight sets of piano legs for Mr. Lemuel Gilbert; the blocks were glued up and shaped out with a gig saw; we then undertook to fit them to the caul by hand, as had been done at Lemuel Gilbert's factory; this we found to be a very slow and tedious job; Mr. Goodman, with myself, felt that there must be some
387 way to plane those surfaces, which was talked over between us; we finally made a cylinder, he making the iron work and I the wood part, which cylinder we put in a lathe, and passing one part of the leg under, we could cut a true circle where we wanted one; this being imperfect, that was abandoned after trying the experiment; Mr. Goodman then expressed some ideas of a machine, saying, as near as I can recollect, that there could be a groove made in the table of the form of a leg; his other ideas I couldn't understand at all, nor could I see how that would work; after this (our last experiments having been on Saturday) I went to Mr. Goodman's house on Sunday night, I suppose, and told Mr. Goodman that I had an idea for a machine, which I expressed to him, and explained as near as I could, and wished him to come up on Monday and we would see what we could make; we then perfected our machine together as best we could; my idea was to have spiral cutters; he said "straight cutters will go, I think;" some other changes he made which I well remember; the friction rollers, he said, could be put under the arbor to save the friction on the arbor; my idea was to put the friction rollers on the arbor.

Cross-int. 16. Have you stated all that Mr. Goodman suggested?

Ans. I don't remember anything more.

Cross-int. 17. When was the use of the index or dial suggested, and by whom?

Ans. I think, while we were building the first machine, by myself.

Cross-int. 18. You mean to be understood, do you not, that you invented all the machine excepting what you have mentioned as being suggested by Mr. Goodman?

Ans. I don't know what Mr. Goodman had in his mind. I think I made these suggestions which I have stated precisely as I have stated them.

Cross-int. 19. In your explanations to Mr. Goodman on Sunday night, did you describe the machine as it was finally built, with the exception of these two things which you say was suggested by Mr. Goodman?

Ans. The patterns and the rollers were suggested to him by me, at that time, the rollers to be put on to the arbor; then the rest part we were to study up how to make it. The means for raising and falling the cutter we hadn't calculated, and didn't until we got to work.

Cross-int. 20. In your answer to the one hundred fifteenth direct interrogatory you say Mr. Geo. T. Johnson and Mr. Fales were sent to Westfield for the purpose of making some arrangement; why were

they sent to Westfield for this purpose when all the parties were at Dana except Mr. Oaks?

Ans. They were all at Dana except Mr. Oaks.

Cross-int. 21. Where were they?

388 Ans. I don't know. I expected Mr. Fales and Mr. Charles H. Stimpson had gone to Westfield, to make the first payment, and was told Mr. Warren Stimpson had gone.

Cross-int. 22. How could Mr. Fales have been sent to Westfield with Mr. Johnson, if had already gone there with Mr. Stimpson?

Ans. Mr. Fales went the night before, part way.

Cross-int. 23. Do you mean to be understood that he was not sent with Mr. Johnson?

Ans. Mr. Fales went about four miles the night before, and met Mr. Stimpson at Belchertown, I think; Mr. Lindsay and Mr. Johnson also met them there, as they told us when they came home. (Upon referring to the answer to the one hundred and fifteenth interrogatory, witness says:) That is a mistake; I should have said Mr. Johnson and Mr. Lindsay.

Cross-int. 24. Did you ever make any demand upon either Mr. Stimpson, Mr. Oaks, or Mr. Fales to convey to you your share of the Westfield property, or the whole of it, and offer to pay for your share, or for the whole of it?

Ans. It doesn't hardly look reasonable; I shouldn't want it divided up so. We instructed Mr. Johnson and Lindsay not to let Mr. Fales give up his share to the Stimpsons, but to take Mr. Stimpson's share off his hands if he would give it up. I never made any such demand or offer as that inquired of.

Cross-int. 25. Before the committee were sent to Westfield to make the purchase, or afterwards, was there any agreement made as to how the property at Dana was to be held by the proposed partners, or was any such agreement made after the property was purchased at Dana?

Ans. There was not; it was merely talked over.

Cross-int. 26. Did you ever offer to convey or assign to the proposed partners their respective shares of the Dana property?

Ans. No sir; not that I remember.

Cross-int. 27. Was any agreement made before the committee was sent to Westfield as to the amount of capital which each was to contribute, or the kind or amount of personal service each was to render, or as to the duration of the copartnership?

Ans. There was no agreement made to my knowledge.

Cross-int. 28. Was any such agreement made after the purchase of the Westfield property?

Ans. There was not.

Cross-int. 29. Where were you the day before you started for New York with Mr. Johnson?

Ans. I was in my office the greater part of the day.

Cross-int. 30. Were you there in the afternoon or in the evening?

389 Ans. I don't think I was there in the evening.

Cross-int. 31. When did you make the arrangement with Mr. Johnson to go to New York?

Ans. According to the best of my memory it was made very early Friday morning, just before starting.

Cross-int. 32. Did you see Mr. Johnson on the evening before?

Ans. I think not.

Cross-int. 33. When you started for New York with Mr. Johnson, had you given up the idea of forming a company in accordance with the original plan before the Westfield purchase was made?

Ans. We had given that up.

Cross-int. 34. When did you first give it up?

Ans. After hearing the report of Mr. Lindsay and Johnson when they returned from Westfield.

Cross-int. 35. When was that?

Ans. My impression is, that it was the day before we started for New York.

Cross-int. 36. In your answers to the ninety-fifth and ninety-sixth direct interrogatories, you say that Mr. Lindsay was a selectman of the town, and as to intelligence, character, and business capacity he had the name of being one of the first men; couldn't you add to the list of his virtues that he was a first-rate temperance man, a teetotal abstinence man?

Ans. I've no knowledge of Mr. Lindsay's ever joining the temperance society. I never did myself.

Cross-int. 37. I do not inquire as to his being a member of the temperance society, but I wish to know whether he was then and has been ever since a temperence man in the ordinary acceptation of that term, or whether he then was or has since been an intemperate man in the use of intoxicating drinks?

Ans. I don't know that I ever saw him drink in the world, but I have no doubt that he has taken too much at times, since that time. I consider a man that takes any at all takes too much.

Cross-int. 38. I repeat the question, and ask for a direct answer.

Ans. As it comes in the family, I refuse to answer that question.

Cross-int. 39. Explain what kind of a spoke could be made on a machine like Mr. Power's, which you saw recently at his place, by means of a curved cutter, and by turning the spoke in the manner you suggested.

Ans. It could be partly blocked out and would have to be finished by hand.

Cross-int. 40. Could you make any other spoke in that way except a round one?

390 Ans. You could make an oval one.

Cross-int. 41. The two sides then could be curved just alike, and have the same curvature towards both edges of the spoke, could they not?

Ans. I should think not.

Direct resumed:

Int. 1. Did you build the machine referred to in the fourth direct interrogatory and answer of Mr. Cephas Church?

Ans. I built a machine for T. Gilbert & Co. of that kind.

Int. 2. Please read twenty-seventh and twenty-eighth cross-interrogatories and answers of your own, and state what the agreement or understanding was between the proposed partners as to the amount of capital which each was to contribute, and the service each was to render.

(Objected to as assuming that there was an agreement when the witness states there was not.)

Ans. I don't recollect that we ever made any agreement. There were several suggestions made, some suggesting one thing and some another. There was an amount specified, I think, that would be required to carry on the business. What it was I can't say. There was an understanding that each should put in his services. I expected it for one.

Int. 3. Was there an understanding, or agreement, as to the amount of capital to be put in by each being in proportion to his share in the business?

Ans. There was such an understanding, I think.

Int. 4. You have testified that the block in the first machine was keyed up. Please state clearly how the foot of that block was held in that machine?

Ans. I am very sure that it was keyed, and also a wooden screw put in to hold it. We sometime put a support underneath.

Cross resumed:

Cross-int. 1. In the negotiations which took place at Greenfield, was the Oaks machine, at Westfield, spoken of in terms in connexion with the license contained in the written agreement?

Ans. I don't know as it was.

Cross-int. 2. In your answer to the second direct resumed interrogatory, do you mean by the term "specified" an amount, agreed upon or only an amount mentioned, or spoken of?

391 Ans. I didn't consider that we made any agreement; I meant by the word that there was an amount mentioned or spoken of.

Cross-int. 3. In that answer and in the next, when you say there was an understanding, do you mean that there was an agreement which the parties entered into?

Ans. I don't understand that we made any agreement; we didn't get as far as that.

Cross-int. 4. (De bene.) In answer to the one hundred and thirty-second direct interrogatory, you say your opinion always was that Wheeler had no right to run the machine referred to. Why did you think so?

(Objected to.)

Ans. Because it was a patented machine, or an infringement upon our patent.

Cross-int. 5. What consent did Mr. Wheeler need from you to manufacture cone legs?

(Objected to.)

Ans. I don't know, unless he thought they would take the place of the machine legs.

Cross-int. 6. Had you any patent on the cone leg or any control over it, in any way?

(Objected to.)

Ans. No, sir, not otherwise than his promise not to go into the business after he had finished up those on hand.

Direct resumed:

Int. 1. (De bene.) Did you ever understand that Mr. Wheeler had a right to manufacture cone legs on your machine without your consent?

Ans. I never did.

WARREN HALE.

392 *Deposition of Charles N. Doane.*

SEPTEMBER 2, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Charles N. Doane; age, thirty-four years; residence, North Dana; occupation, teamster.

Int. 2. Were you associated with Lyman Wheeler at North Dana, working under a contract with Johnson, Stimpson & Co. to make piano legs?

Ans. Yes, sir.

Int. 3. Were you with him at the time that contract was terminated, and how long before?

Ans. I was with him at the time it was terminated; I couldn't say how long before, five or six months, I should think.

Int. 4. During this time was Mr. Wheeler accustomed to talk with you about what he had done in time past in the way of inventions or machinery? How frequently and how freely, if at all, did he so talk?

Ans. He used to talk freely with me about his affairs and inventions, and frequently.

Int. 5. Did he at any time mention to you any machine he had ever made or invented for cutting or planing out chisel handles or like articles?

Ans. I don't recollect that he ever did.

Int. 6. Did he ever speak of any machine which he had ever got up, or tried to get up, for making piano legs, or like articles? If so, please state the place and circumstances of his referring to this matter, and state what he said, giving his words, if you can, and the substance of them if you cannot.

Ans. I was at Rufus Powers's mill with him (Wheeler,) and saw the leg which he and Powers together had previously made, (I think he

said they was together.) We was talking about piano legs, and he was talking of getting up the invention.

Int. 7. Did Mr. Wheeler have one of the legs in question, or a piano leg, in his hands when speaking of the matter?

Ans. I think he had. He got one and showed it to me then.

Int. 8. Now please state, as nearly as you can, how Mr. Wheeler expressed himself in regard to his and Mr. Powers's previous work with leg machines.

Ans. We was talking about making legs, and about inventing machines, and he spoke of their trying to get up a machine to work.

Int. 9. Who do you mean by "their" trying?

Ans. Wheeler and Powers.

Int 10. Please look at the defendant's exhibit marked Wheeler
393 No. 3, in two parts, A and B, and say if, in all your conversations with Mr. Wheeler, he mentioned to you any such machine as is there shown?

Ans. No, sir; he never did.

Int. 11. When your contract with Johnson, Stimpson & Co. came to be terminated, was any objection expressed on their part to your continuing the machine in use for certain purposes, such as melodeon legs and newel posts? If so, what did Mr. Wheeler say to you, if anything, upon that subject?

Ans. There was some objection—nothing very great; Mr. Wheeler said he could get up a machine we could make them on, if we did not have the right on that machine.

Int. 12. Did he describe to you the machine which he could so get up? If so, please repeat his description as well as you can.

Ans. There was to be an iron table with the cutting cylinder standing perpendicular. It was the machine of which I afterwards saw at part, while Mr. Wheeler was building it. After it was finished it went to Westfield; I think it was a year ago last July I saw him building it.

Int. 13. Did your conversation with Mr. Wheeler at Mr. Powers's mill take place during the time you were associated with Mr. Wheeler in the contract with Johnson, Stimpson & Co.?

Ans. Yes, sir.

Int. 14. In all the negotiations and consultations which took place with Johnson, Stimpson & Co., or Mr. Johnson and Mr. Goodman, as their committee, with a view to terminating your contract, did you ever hear any objections made to Mr. Wheeler's building any other machine that he preferred for doing the work he reserved the right to do, instead of using the Hale and Goodman machine which you and he had used together?

Ans. I don't know that I ever did.

Int. 15. Have you any recollection of any such thing?

Ans. I haven't.

Int. 16. When, afterwards, the Hale & Goodman machine so retained by Mr. Wheeler came to be sold to Johnson, Stimpson & Co., and Mr. Wheeler had occasion to build a machine to take its place for his own use, do you know any reason why he should not have built any

machine of his own which would have answered his purpose, instead of building another Hale and Goodman machine?

Ans. I do not.

CHARLES N. DOANE.

394 *Deposition of Lucius Sibley.*

AUGUST 31ST, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Lucius Sibley; age, 63 years; residence, Petersham, Mass.; occupation, I've been a farmer most of my life.

Int. 2. Were you in partnership with Mr. Lyman Wheeler in the town of Orange, at any time? and if so, from what time to what time, as near as you can state, and in what business?

Ans. Yes, I was in with him; I think I went in in '56, about the middle of December, and I believe it was in July, '58, that I dissolved partnership. We made pianoforte cases, billiard tables, and melodeon legs.

Int. 3. What machine did you use in making melodeon legs?

Ans. What was called the Hale machine, brought there by Mr. Wheeler.

Int. 4. Please look at the model now shown to you, and marked "Hale & Goodman, Exhibit 1," and say if that represents what you call the Hale machine, and the machine which you and Mr. Wheeler used.

Ans. I should think it did.

Int. 5. While you and Mr. Wheeler were in company together, did you ever hear him say anything, and what, about any machine that he had ever invented, which could be used instead of this machine for the purposes of your business? any machine for any such work?

Ans. I never did; I never had any knowledge of any machine while I was in with him.

Int. 6. Did you and Mr. Wheeler have any talk as to using your machine in making piano legs? If so, what led to your speaking of it?

Ans. We had a talk about it; the times were very hard; it was a business I wasn't used to, and I got rather sick of it.

Int. 7. What passed between you upon this subject, as near as you can state it?

Ans. I think I asked him if there cculdn't be some arrangements made so that we could make piano legs. He said the patent would run out at a certain time, and then we should be on an equal footing with the company, the Dana company.

LUCIUS SIBLEY.

395 *Deposition of Alpheus J. Nye.*

SEPTEMBER 20, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Alpheus J. Nye; age, 33 years; residence, North Dana, Massachusetts; occupation, pianoforte leg maker.

Int. 2. Have you ever used the Westfield machine? If so, from what time to what time, and where?

Ans. I have, at Westfield, from, I think, 24th March, 1857, to some time in October of the same year.

Int. 3. In what part of the building was that machine, and if in a room by itself, how many men worked in that room?

Ans. It was on the second floor in a room partitioned off by itself; one man besides myself worked in the same room constantly, and sometimes, not often, others.

Int. 4. Please describe the operation of cutting a leg upon that machine fully and minutely.

Ans. The dial was placed in the head of the leg, and the leg placed properly in the carriage, then the cylinder in the swing is lowered upon the leg by a lever, the carriage is run along with the right hand under the cylinder, the left hand remaining under the lever. In the operation it is often necessary to raise the cylinder by the lever.

Int. 5. Why is it necessary to raise the cutting cylinder by the lever?

Ans. For two reasons, that it is easier for the operator, and that it does the work better.

Int. 6. Please point out the part of the leg, in cutting which it is necessary to use the lever with the left hand.

Ans. In all sharp turns.

Int. 7. In cutting a leg on this machine, do you always run the cutter from one end to the other without stopping? and if not, how otherwise?

Ans. No, sir; we frequently commence and run backward for a short distance. In cutting a leg there may be a flat surface or a bad place in the timber, or a prominent part of the leg, in which case I set the cylinder on to it and run it backwards. This we do by raising the lever, holding the cylinder clear from the leg and running the carriage under it.

Int. 8. What would be the effect upon that flat place or bad place on the prominence, if this were not done?

Ans. It would be very liable to split out, almost an absolute
396 certainty. It is possible to cut a leg by running it right straight through, but not practicable. It is not the usual custom to run through the leg without using the lever.

Int. 9. Did you ever cut a leg yourself, or did you ever see any one else cut a leg on the Westfield machine, without using the lever with the left hand, to ease the cylinder on the rollers up the abrupt places on the pattern?

(Objected to)

Ans. I might for an experiment, but not in practical use; not in the common use of the machine.

Int. 10. Who was the man that worked with you—his name I mean, and his place in the shop?

Ans. William N. Chamberlin. He was in the same room with me; we worked on the same work alternately; he cut and I patched, or I cut and he patched. It would be pretty hard work to run the machine all the time for one man.

Int. 11. When he cut legs on that machine did he make any use of the lever? and if so, whether more or less than you did?

(Objected to.)

Ans. I should judge very nearly the same. He usually set with his hand upon the lever all the time during the cutting of a leg.

Int. 12. In cutting legs in that machine does the operative stand or sit, and where does he keep his hands?

Ans. He sits, with the right hand on the crank that operates the carriage, and the left hand upon the lever, usually.

Int. 13. Of what material is the swing frame which holds the cutter in the Westfield machine, and what are its dimensions, as nearly as you can give them?

Ans. It would be a mere measurement of the eyes. It was made of iron, I should think not far from four feet long, perhaps a trifle less.

Int. 14. Please compare it with the swing frame on "Stimpson, H. L. H.," and state whether the parts in that model are in the same proportion as on the machine. I refer entirely to the swing frame.

Ans. As regards length, I should think the proportions very nearly the same; otherwise a trifle larger, proportionally, in the model than in the machine.

Int. 15. Suppose that lever is taken off, how much strength, in your judgment, would it take when applied to the crank to drive the carriage under the cutters? State first whether there is any other weight than the cutter which is lifted by the motion of the carriage. I mean supposing the pattern to be as now shown in the model "Stimpson, H. L. H."

(Objected to.)

397 Ans. There is a weight hung to the carriage heavy enough to draw the carriage back, which a man is obliged to pull up in driving the carriage under the cutter. I can't tell how much strength it takes, but it is pretty hard work. I often used to use my knee to help my right hand in going up a steep place, even when I had the lever to ease the rollers up the pattern.

Int. 16. In your opinion, would the Westfeld machine be a practically useful machine for cutting legs, except of the plainer patterns, considering the carriage to be driven as it now is, and the lever taken off?

(Objected to.)

Ans. No, sir; not unless the gear, or something equivalent to the lever, were applied.

Int. 17. How much difficulty did you experience in learning to run the Westfield machine?

Ans. Very little. I was perfactly familiar with the Hale & Goodman machine before I run that machine.

Int. 18. When the patterns required to be changed in the Westfield machine, who did it?

Ans. The foreman, Mr. William N. Chamberlin.

Int. 19. Do you know whether there is any difficulty in chang-

ing these patterns, and how long it takes? If so, please state minutely.

Ans. Usually, I should think, he did it in an hour's time; but there was a difficulty in adjusting the gear properly. I've seen him work at least three hours before he could operate the machine.

Int. 20. Did you never change the patterns yourself, and if not, why not?

Ans. I did not. I never was set about it.

Int. 21. Whose business was it?

Ans. The foreman's, William N. Chamberlin. He thought I wouldn't get it right if he set me about it.

Int. 22. How many legs per day can a man cut on the Westfield machine? State also what is the greatest number you ever cut in a given time.

Ans. I should think eighteen or twenty sets would be a good day's work for a man to do, as much as he would be able to average. I have cut eleven sets in five hours.

Int. 23. Did Mr. Loomis know of your cutting these eleven sets in five hours? If so, state what he did and said about it.

Ans. He did. He seemed quite surprised, and would hardly credit it, and came to look; he would hardly believe it till he looked them over.

Int. 24. What kind of work do you call it to run a Westfield machine?

Ans. I call it laborious work.

398 Int. 25. What kind of work would you call it if you had to run that machine without the lever?

Ans. It would be still harder work.

Int. 26. Have you ever run the Hale & Goodman machine? If so, how much, and when did you first use it?

Ans. Yes, sir; I've run it a considerable part of the time for four or five years, as much as that, I should think. I should think it was in the spring of '54 that I first run it, as near as I can recollect.

Int. 27. Who owned the Westfield machine when you worked on it?

Ans. The name of the firm was Bosworth & Loomis.

Int. 28. Who owned the Hale & Goodman machine when you first used it?

Ans. The name of the firm was Stimpson & Doane.

Int. 29. How much difficulty did you experience in learning to run the Hale & Goodman machine?

Ans. Some difficulty in making proficiency in it, although the first work I made was perfect work and sold well. I commenced right off to operate the machine, and continued so to do without losing any time, or anything of that kind.

Int. 30. How long did it take you to get accustomed to using the right and left hand cranks?

Ans. I should think less than a week, from the fact that the move-

ment of the carriage with the right hand indicates the movement of the crank with the left.

Int. 31. How many legs did you spoil when you first began work on that machine?

Ans. I've no recollection of spoiling any. I might have done so, although I've no recollection about it. It's not uncommon for a leg to be spoiled, even by an old hand.

Int. 32. How is this on the Westfield machine?

Ans. It's the same, because the same causes produce like results; carelessness or inadvertency in operating the machine is the sole cause.

Int. 33. How does the work of running the Dana machine compare with the work of running the Westfield machine?

Ans. I think it is very much harder work to run the Westfield machine. It must necessarily be so on account of the great heft, both in the swing frame and the carriage in that machine.

Int. 34. How many legs per day can a man cut on the Dana machine?

Ans. On an average twenty-four or twenty-five sets, taking all the patterns together.

399 Int. 35. What are the greatest amounts per day that you know to have been cut, and by whom, when, and what patterns?

Ans. I have cut within two weeks forty sets of melodeon legs in a day; the man besides me working a machine precisely like it cut one day thirty sets of gothics, and one day twenty-nine sets.

Int. 36. Did you work any extra time when these melodeon legs were cut?

Ans. No, sir, ten hours for a day; I got through before the usual time for quitting work.

Int. 37. How do you work?

Ans. By the day.

Int. 38. What kind of legs were these gothics that you speak of? Point out the pattern on Exhibit "Frost."

Ans. Like No. 8.

Int. 39. Did you ever work for Lyman Wheeler making piano legs; and if so, when?

Ans. Yes, sir, I think in 1854.

Int. 40. What machine did you use?

Ans. Hale & Goodman.

Int. 41. Did Wheeler ever have any talk with you at or about that time, about any machines he had ever gotten up for any purpose? If so, what did he say?

(Objected to.)

Ans. I've no recollection of any conversation about any machine except the toothing machine for toothing veneers, which he was getting up or improving about that time.

Int. 42. What kind of a man was Wheeler? that is, was he in the habit of talking freely, or was he a man who kept his tongue to himself?

(Objected to.)

Ans. He was a pretty social sort of a man, about as talkative as people will average; a very pleasant kind of a man.

Int. 43. How much experience had you had when you went to work for Wheeler, in cutting legs on the Hale and Goodman machine?

Ans. Not any.

Int. 44. Please refer to your twenty eighth interrogatory and answer, and state which machine you run first, Stimpson & Doane's, or Wheeler's.

Ans. Stimpson & Doane owned the machine, and Wheeler was making legs on their machine on a contract, or at least that was my understanding of it.

Int. 45. Do you recollect a bet you made at that time to cut
400 a certain number of sets in a given time? If so, how many sets did you cut on that occasion, in what time, and of what pattern?

Ans. They were the old seventeens, I should think. They are the fifteens in "Frost" exhibit. I cut ten inside of three hours. I remember the circumstances of the bet, and I remember the number of legs from the circumstance that there was a bet. I might have made more since then, no doubt I have, but it isn't in my mind now.

Int. 46. About how long had you been running the Hale & Goodman machine when you cut those ten sets?

Ans. I couldn't state the time. I didn't work with Mr. Wheeler but one year, and it must have been within that time.

Int. 47. Did you ever have any talk with Mr. Allen Goodman about whether the Westfield machine infringed upon the Hale & Goodman patent or not? If so, when was it, and what was said? State as nearly as you recollect.

(Objected to.)

Ans. I recollect having a conversation, but don't know whether I can determine the dates or not. I guess it must have been in '59, after I went back from Westfield. I asked him if he thought it was an infringement; he said he thought there was no doubt of it.

Cross-interrogatories:

Cross-int. 1. How long before Mr. Wheeler gave up his contract did you work with him?

Ans. I don't know when he gave it up. I think I must have been away from the village at that time, but have no recollection about it.

Cross-int. 2. In what year was it that you worked for him?

(Objected to as already answered.)

Ans. I think in 1854. I'm not positive whether '54 or '55, but I think '54.

Cross-int. 3. What pattern of melodeon leg was it that you cut the forty sets a day of?

Ans. No 23 on exhibit "Frost."

Cross-int. 4. What does the patcher have to do?

Ans. His work is to patch the legs when they are broken out by the machine, or where there are bad places in the timber, so as to make the leg whole.

Cross-int. 5. How much work is it to do the patching for what one man would do on the machine?

401 Ans. It hadn't ought to be so much work to do the patching, if the cutting is properly done. I mean a man ought to patch more than he could cut.

Cross-int. 6. How is it actually in the ordinary course of the manufacture of legs?

Ans. I don't know, but I can state it as well from my own experience as any way. George Stevens and I worked together on the Hale & Goodman machine. He did the cutting and I the patching, turning, and boring. That was the usual system. Very rarely he did assist me some, but not usually.

Direct resumed:

Int. 1. How does the amount of patching requisite on legs cut on the Hale & Goodman machine compare with the amount on legs cut on the Westfield machine?

Ans. I think, all circumstances being equal, the Hale & Goodman machine cuts quite as well. What I mean by circumstances being equal refers to the timber.

Int. 2. What does the amount of patching requisite depend upon? I mean whether upon the mechanic or the quality of timber used.

Ans. It depends upon a thousand circumstances that a man not understanding the business couldn't comprehend, going clear back to the commencement, putting the blocks together, and depends very much on the manner of operating the machine.

Int. 3. Take the same man, and give him the same kind of timber, would he make more work for the patchers on one machine than on the other? and if so, on which machine would he make most?

Ans. I think when I crowded the machine—did a large day's work on it—I didn't do the work quite so well on the Westfield machine as I could on the Hale & Goodman machine.

ALPHEUS J. NYE.

402 *Deposition of John F. Chamberlin.*

SEPTEMBER 20TH, 1864.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is John F. Chamberlain; age, 37; residence, Dana, Mass,; occupation, mechanic.

Int. 2. Have you ever used the Westfield machine? If so, from what time to what time, and where?

Ans. Yes, sir. I went there to work in 1860 or 1861, I think; I'm not sure which. I commenced in March and worked till the first part of July.

Int. 3. Who did you work for?

Ans. I worked for my brother.

Int. 4. Who did your brother work for?

Ans. Stimpson & Co.

Int. 5. In what part of the building was that machine? and if in a room by itself, how many men worked in that room?

Ans. It was on the second floor in the southwest corner, I should think; not in a room by itself. There was other machinery in that room. I guess five or six persons worked in that room.

Int. 6. Was the door of this room kept open?

Ans. Yes, sir.

Int. 7. Were the men in the establishment allowed free access to this machine, or was it kept secretly?

Ans. They were allowed free access when I worked on the machine.

Int. 8. Did you ever work at that place before? If so, for whom?

Ans. Yes, sir; for Bosworth & Loomis.

Int. 9. At that time was this machine run secretly or openly, or were any attempts made, and what, to keep it from being seen?

(Objected to.)

Ans. Yes, sir, it was kept secret. The door was closed and locked.

Int. 10. Please describe the operation of cutting a leg upon the Westfield machine fully and particularly?

Ans. The index was put on the head of the leg, the leg placed in the carriage, the cylinder let down by the lever on to the patterns, and then the carriage is run through under the cylinder.

Int. 11. For what purpose is the lever used. and with which hand?

Ans. With the left hand, for the purpose of lowering and raising the cylinder.

403 Int. 12. Is it used at all in the operation of cutting a leg? and if so, why?

Ans. It is used. I used it for the purpose of making the labor easier, with the right hand, and doing the work better.

Int. 13. Do you always run the carriage in the same direction in cutting a leg, or do you sometimes cut backwards? and if so, why?

Ans. I sometimes cut backwards, because it saves tearing up on the shoulder, where the timber is poor, and where there is but little to take off.

Int. 14. How frequently is it necessaay to cut backwards?

Ans. I couldn't state exactly; it may be, I will say, one-half of the squares that requires to set forward and run back.

Int. 15. Did you ever cut a leg yourself, or did you ever see any body else cut a leg in the Westfield machine, without using the lever with the left hand to ease the rollers up the steep curves of the pattern?

Ans. I never cut one myself but what I did. I have seen other persons do so.

Int. 16. In the common use of that machine, is it not habitual with all operatives, so far as you know, to use the lever with the left hand for that purpose?

(Objected to.)

Ans. Yes. sir.

Int. 17. What was the reason, if you know, that the lever was not so used by the persons spoken of in your fifteenth answer?

Ans. I don't think I stated that I had seen others cut legs without using the lever. I never have seen them.

Int. 18. In cutting legs in that machine, does the operative stand or sit? and where does he keep his hands?

Ans. He sits; with his left hand hold of the lever, and his right hand hold of the crank.

Int. 19. Of what material is the swing frame in the Westfield machine, and what are its dimensions as near as you can give them?

Ans. Of cast iron; the length of the swing frame four feet, I should think.

Int. 20. Please compare it with the swing frame on "Stimpson, H. L. H.," and state whether that is a copy of the swing frame on the Westfield machine, and if not, how it differs.

Ans. I should think they were alike.

Int. 21. How much heavier is the frame in the Westfield machine than the frame in the Dana machine, as near as you can state?

Ans. I couldn't state it. I never weighed either one of them. I should think the Westfield frame was nearly as heavy again.

404 Int. 22. Is there a weight attached to the carriage on the Westfield machine? and if so, what for?

Ans. Yes, sir, for the purpose of pulling the carriage back.

Int. 23. Suppose that lever was taken off, how much harder work do you think it would be to cut a leg with the patterns now on the model "Stimpson, H. L. H.," than with the lever upon it, as near as you can state?

Ans. It's hard to state it, for I never tried it.

Int. 24. In your opinion, would the Westfield machine be a practically useful machine for cutting legs, except for the plainer patterns, if the lever were taken off, the carriage being driven as it now is? (Objected to.)

Ans. No, sir, it would not.

Int. 25. Who changed the pattern of the Westfield machine when they required changing?

Ans. My brother, W. N. Chamberlain.

Int. 26. Was he the foreman of that department?

Ans. Yes, sir, when I was there.

Int. 27. Do you know whether there is any difficulty in changing these patterns, and if so, how long it takes? Please state minutely.

Ans. Yes, sir, there was difficulty. I've known it to take three hours to change them, and I've known them to be changed in the space of five or ten minutes.

Int. 28. What was the average time, as nearly as you can state?

Ans. I should think about a half an hour.

Int. 29. Do you know the reason of the difficulty in changing patterns? If so, please state it.

Ans. I do not know the difficulty. It is in the cog-wheels.

Int. 30. Whose business was it to change these patterns when they required it.

Ans. The foreman made it his business.

Int. 31. How many sets of legs a day was called a good day's work on the Westfield machine when you run it?

Ans. From eighteen to twenty sets.

Int. 32. How many is the most you ever cut in a day?

Ans. I cut thirty or thirty one sets of melodeons.

Int. 33. What kind of a day's work did the foreman?

(Objected to.)

Ans. The best day's work that had ever been done on the machine.

Int. 34. When did you first commence to cut legs on the Dana machine, as near as you can state?

Ans. A year ago last winter, about the 20th of December.

405 Int. 35. How much difficulty did you have in learning to use that machine?

Ans. I didn't have any particular difficulty at all.

Int. 36. When you were first set to work, were you set to work to learn how to use the machine or to cut legs, and did you use it off and on? and if so, for how long before you began to work regularly by the day?

Ans. I was set to work at first to cut legs. I didn't use it at all before I began to work regularly by the day.

Int. 37. What difficulty, if any, is there in changing the patterns on the Dana machine, and how long does it take?

Ans. I know of no difficulty. It takes about ten minutes.

Int. 38. What trouble did you have, if any, in learning to use the right and left hand crank at the same time?

Ans. I didn't have any trouble in learning.

Cross-examination:

Cross-int. 1. (De bene.) When was it you worked for Bosworth & Loomis, and how long did you work for them?

Ans. I couldn't tell you. It was at the commencement of their doing business, and I worked about a year for them.

Cross-int. 2. (De bene.) Where did you go to reside and to work then?

Ans. To Dana.

J. F. CHAMBERLIN.

Deposition of Jairus A. Frost.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Jairus A. Frost; age, fifty; residence, Boston, Mass.; occupation, pianoforte maker.

Int. 2. For whom do you now work, and how long have you been at work for them?

Ans. For A. M. McPhail. I've been at work in the shop for twenty-five years last May. Mr. McPhail succeeded Lemuel Gilbert in the same place four or five years ago. I worked for Gilbert before McPhail succeeded him.

Int. 3. What was Gilbert's business?

Ans. He was a pianoforte manufacturer.

406 Int. 4. Before the year 1845 what kind of legs did Gilbert use for pianos, and how were they made?

Ans. They are usually what are called cone legs, eight-square, round, and four-square. They were blocks glued up in the first place, then sent out to the sawyer's and sawed out eight-square, and then

returned to the shop and fitted for veneering. The four-square were made in the same way, and the round ones were turned.

Int. 5. About this time, or a year before, were any other legs introduced having an irregular curved surface? If so, what were they called, and how were they made?

Ans. They were calied ogee legs. In the first place we sawed out the stock, which was plank two or three inches think, large enough to make the shape of the block, then dried them in the dry-room, then glued them up to make the block, then sent them to the sawyer with a pattern of the desired curve, then the sawyer marked the block and gig-sawed it. They were then brought back to the shop and fitted for veneering.

Int. 6. Please describe, fully, the work of fitting these sawed legs for veneering.

Ans. After they were brought back, that is, after they were gig-sawed as near the line as they could get them, the veneerer took them, and with chisels, files, planes, spoke-shaves, &c., reduced them so that they would fit the caul, for the sawyer would always saw a little larger than the pattern, leaving irregularities which we had to work off, or work down, in this way.

Int. 7. What was the cost of the four-square plain legs per set, finished, and what of the ogee legs per set?

Ans. As near as I can recollect, there was somewhere about three dollars difference on a set.

Int. 8. Suppose that you paid a workman nine dollars per set for fitting and veneering the plain square legs, and twelve for the ogee, what more was paid for the stock and sawing?

Ans. Three dollars a set. It would cost a little more for sawing the ogee.

Int. 9. What was the cost per set of sawing both kinds, the sawing alone?

Ans. As near as I can recollect, it was nine shillings. That included boring for the pin and sinking for the caster.

Int. 10. Please point out on the circular marked "Hinckley, N. A. P., examiner," the kinds of legs used by Gilbert and McPhail & Co. during your connexion with them, stating what kind they now use.

Ans. No. 23 we now use. There is some difference with the different manufacturers in the styles. I should think, from the
407 appearance, that we used several different kinds within the last fifteen years: No. 33, I think, or No. 7, on Exhibit "Frost, N. A. P., ex'r," also No. 15 on the latter exhibit.

Int. 11. Will you state what, if any, legs represented in these exhibits are what you call the ogee leg?

Ans. I call all these on exhibit "Hinckley." except 38, 29, and all the fluted legs, which we always call "fluted." I don't know that any other firm in the city call these ogee legs. They are generally called "machine legs, No. so and so." On the Frost exhibit, I should call No. 16 a regular ogee—all the legs with long sweeping curves, we call ogees. Those with the gothic addition we called a

gothic ogee. No. 7 we never called an ogee; it was straight in the centre.

Int. 12. What would be the cost, in your judgment, of fitting by hand a set of legs for veneering like No. 23 on exhibit "Hinckley?" I mean after it was sawed out.

Ans. I shouldn't want to undertake to get it up less than twenty dollars a set. They are what we call gothic ogee.

Int. 13. About what time did the ogee legs first come into fashion?

Ans. I've nothing to govern me as to that—no dates. I think it was some twenty years ago, as near as I can remember.

Int. 14. Was Mr. George A. Hinckley then working for Mr. Gilbert? and if so, what was he doing?

Ans. He was, at the time I'm thinking of now, veneering ogee legs. It may have been eighteen years ago—from eighteen to twenty.

Int. 15. Did he veneer legs before the ogee style came out? and if so, what style of legs?

Ans. He was veneering a four-square leg, plain.

Int. 16. Do you recollect of a question arising as to the proper price to be paid for veneering these four-square, plain legs? and if so, what was it, and what was done about it?

Ans. I think, at the time, as near as I can recollect, there was some disagreement between Mr. Gilbert and Mr. Hinckley, as to the price of working them out. Mr. Gilbert thought the price too high. The main thing was working them out, that is, fitting them to the caul. After this was done, the veneering was very little trouble. It was rather referred to me, and I told Mr. Gilbert to let him have a fair trial, to work out a set and set a price on that set. He did so, and the price, I think, was set at nine dollars, but I'm not exactly sure.

Int. 17. Please make a drawing on exhibit "Hinckley" of the four-square, plain ogee leg.

408 Ans. I have done so, and written "ogee, Frost" in one, and "four-square, Frost" in the other.

Int. 18. Did the introduction of machine legs affect the styles of legs, and if so, how?

Ans. Yes, sir; it brought in use the eight-square ogee legs, and from that, gothic and other irregular shapes of legs.

Int. 19. What sort of work was fitting these blocks by hand for veneering, hard, easy, or ordinary?

Ans. It wa'nt what I should call hard work, it was bothering to the mind; for if you didn't get it right in just one point, you had to go over the whole face again, otherwise the caul wouldn't fit.

Adjourned.

SEPTEMBER 19, 1864.

Int. 20. Please refer to the twelfth interrogatory and answer, and state what you mean by "fitting."

Ans. I meant fitting and veneering; for fitting alone, without veneering, twelve or thirteen dollars. I should be willing to pay a man thirteen dollars to-morrow to fit these legs for the caul. I mean.

supposing the wages of a man to be fourteen dollars a week. I should think it would be not far from five days' work, or more, for the set.

Int. 21. What was the cost, as nearly as you can give it, for sawing out the planks into proper shape and drying them, to make the ogee legs—four-square ones, I mean.

Ans. Twenty-five cents per set.

Int. 22. How much for planing these planks and gluing them up?

Ans. We used to pay twenty-five cents per set.

Int. 23. How much for gig-sawing?

Ans. One dollar and fifty cents for gig-sawing and boring for the caster and pin, which was done by the man that did the gig-sawing, that is, in the same shop.

Int. 24. What portion of this dollar and a half do you consider a fair price for boring?

Ans. I should divide it, according to my opinion, as a dollar for the gig-sawing, and fifty cents for the boring.

Int. 25. What kind of stock did you use. how much did it cost a set, and what was the cost of the glue used per set?

Ans. We used to use sometimes pine and sometimes chestnut. It cost about a dollar a set; the pine and chestnut were about the same price at that time; we used a cheaper class of pine, which brought the price down to that of chestnut; on the average, the glue cost about twelve cents.

409 Int. 26. How much was paid per set to the workmen who fitted and veneered these legs?

Ans. I am confident it was twelve dollars. This is as near as I can recollect without the books.

Int. 27. Please give the entire cost of the finished legs per set.

Ans. It would be fifteen dollars and twelve cents.

Int. 28. Do you remember the first job of piano legs Warren Hale took from Mr. Gilbert? If so, state how many sets in that job, and what kind of legs they were.

Ans. I recollect the first job; I don't recollect the number of legs. We usually give them out in a dozen sets. If he had been in a very particular hurry he might have given out six or eight sets. They were four-square ogee legs.

Int. 29. Do you recollect whether this job was required to be done quickly? If so, how quickly, and why?

(Objected to.)

Ans. It was required to be done as quickly as it could, as it was a new style of leg and we wanted to get as many out as we could, and as soon as possible.

Int. 30. What did Mr. Gilbert furnish to Hale for this job, and what work was Hale to do?

Ans. He furnished nothing at all at the time. Hale furnished all his own stock, and sent them in ready to veneer. They were all bored for the caster and for the pins, and the pins sent in with them.

Int. 31. What was paid to Hale per set for this job?

Ans. For the first he got out, I think, five dollars and a half.

Int. 32. Has Mr. Hale or his firm since continued to make piano

legs for Gilbert and his successors? If so, whether with or without veneering, and how many sets a week have they averaged, as near as you can state?

Ans. We have had them since that time either from Hale or from those that had bought his patent. I think he sent in the four-square for three or four months, and until he got up the eight-square, and then we dropped the four-square and went on to the eight-square. Somewhere about two years from the first contract we got them from him or his successors veneered. During these two years we received them unveneered and veneered them ourselves. Since the first contract we have averaged, of what we call machine legs, including all kinds, not less than six sets a week, from them or from others who have made them on that machine.

Int. 33. What was the price per set of the unveneered legs, both four-square and eight-square, and what of the veneered legs?

410 Ans. The four-square were some of the first he made, and I think, after he got his machine running, he made us the eight-square for the same price, five dollars and a half. The price of the veneered legs varies according to the style—seven and a half to nine and a half.

Int. 34. When those legs were furnished, veneered, who found the veneers.

Ans. We did sometimes, and at other times the manufacturer. Then the price varied.

Int. 35. What was the price when you furnished them, and what when the manufacturer furnished them?

Ans. It varied from a dollar to seventy-five cents, the cost of the veneers only. The prices I have given are where the veneers were furnished by us. If the manufacturer furnished the veneers, the price was from seventy-five cents to a dollar more.

Int. 36. How did the unveneered legs furnished by Hale on his first job compare with those fitted for veneering by hand, which had been previously made for Gilbert, as regards accuracy and similarity of faces?

Ans. Those that came from Hale were accurate, and when the caul was once fitted it would fit any number of legs. Those made by hand were not quite accurate.

Int. 37. How many legs were made by hand for Gilbert after this first contract of Hale's?

Ans. I think there were none, because it cost us so much less to get them done by Hale.

Int. 38. You have mentioned certain amounts as prices paid to Hale, and for different portions of the hand work. Were there ever any books which will show the exact amount of these prices? If so, whose books were they, and what? State minutely.

Ans. There were books that would show to a mill or a cent the exact amounts paid. They belonged to Lemuel Gilbert. They were pass-books, that is, small books that the work was put down on when it was brought in, and each man had a pass-book on which the

amount of work he did and the price was set down. When they came to settle they would do so on these books.

Int. 39. State what became of these books; if destroyed, when, where, how?

Ans. Last July, a year ago, we moved from the old shop into a new shop. These pass-books of Mr. Gilbert's were of no use to McPhail & Co., and I sold them for waste paper. They were sold to a junk dealer.

Int. 40. Were any eight-square ogee legs ever made, to your knowledge, before Hale's first contract?

411 Ans. No, sir; I never saw one nor heard of one.

Int. 41. Who made the first eight-square ogee leg you ever saw or heard of?

Ans. Mr. Hale.

Int. 42. How many sets of legs per week, four-square ogee, and how many eight-square ogee, could a man fit for veneering—I mean, fit to the cauls (without putting on the veneers) by the old method in use before the introduction of Hale & Goodman's machine, taking the block from the gig-sawyer after it was sawed?

Ans. I should think about eight legs of four-square and five legs of the eight-square.

Int. 43. What would the labor of such a workman be worth per week at that time?

Ans. About fourteen dollars per week.

Int. 44. Please read the forty-second interrogatory and answer, and state whether or not you understand it to refer to the plainer patterns of ogee legs alone.

Ans. I refer to legs like No. 20, Exhibit "Hinckley," not more complex than that.

Int. 45. You have spoken of certain pass-books used by Gilbert & Co.; can you produce one as a sample?

Ans. I can; I produce one marked "Exhibit Frost No. 2, N. A. P., ex'r." These were not sold to the junk man on account of the blank leaves not written over.

Int. 46. You have said that all the first legs made by Hale were veneered by Gilbert; on further recollection, do you desire to make any change in this statement?

Ans. I would like to do so; it is my impression now that Mr. Gilbert desired him to veneer some few sets, to see if he could have them veneered any less than we could do it.

Cross-examination:

Cross-int. 1. I understand that you commenced making ogee four-square legs a short time before the first job was given to Mr. Hale; how long before, according to your recollection?

Ans. I think it was somewhere near a year; not far from that anyway, as near as I remember.

Cross-int. 2. How many sets had been made before that job was given out?

412 Ans. I couldn't state the number.

Cross-int. 3. Can't you state approximately how many it

Ans. I couldn't, sir; I've nothing to govern me; the books are gone and I can't recollect.

Cross-int. 4. How many sets of all kinds were you using at that time?

Ans. We were getting out, I believe, between four and five piano cases per week; I should think about five.

Cross-int. 5. Did not a large proportion of these have the same kind of legs as those you were using before you commenced making the ogee legs?

Ans. They did, on account of our not being able to get the ogees out fast enough.

Cross-int. 6. Had other manufacturers commenced using the ogee leg at that time?

Ans. Not to my knowledge.

Cross-int. 7. Have you manufactured legs of this kind—I mean the ogee legs—since the time you gave the contract to Mr. Hale? If so, how much?

(Objected to as already answered.)

Ans. As near as I can recollect, we didn't manufacture any, except we might have had some stock ready glued at the mill, which we finished up.

Cross-int. 8. Since that time, then, have you had any practical experience in manufacturing these legs?

Ans. Not any.

Cross-int. 9. Your judgment then as to the cost of the legs, so far as it is based upon experience, rests wholly on your experience twenty years ago, when the manufacture was a new one, does it not?

Ans. My judgment as to the cost of the legs themselves is based upon my experience twenty years ago, that is, the four-square ogee.

Cross-int. 10. Do you wish to be understood by your answer to the forty-second interrogatory that you think it would cost more to work out eight-square legs by hand after they are sawed than it would four-square?

Ans. Yes, sir.

Cross-int. 11. Why?

(Objected to as answered before.)

Ans. Because there are just as many again faces to work.

Cross-int. 12. Which would be the easiest to work, a wide face or a narrow one?

Ans. It would be a little, some easier to work a narrow face.

Cross-int. 13. Couldn't you work the same amount of surface on narrow faces easier than you could on wide ones?

413 Ans. No, sir, not into one-third the labor.

Cross-int. 14. What is the reason?

Ans. I could work a two-inch surface as easily as a one-inch, but an eight-square leg would take a third more work than a four-square leg.

Cross-int. 15. This opinion, I understand, is not based upon any experience in making eight-square legs by hand, is it?

Ans. It is not an actual experience of working, because I have

never worked one of them out, but a mechanic who is used to working at other things can tell how much it is worth to work out legs.

Cross-int. 16. Do you take into account, in forming this judgment, the smaller amount of surface there is in the eight-square leg of the same diameters, I mean by the diameter, the same distance through two opposite faces.

(Objected to.)

Ans. I didn't think of it at that time.

Cross-int. 17. In your answer to the twelfth direct interrogatory, in connexion with your answer to the twentieth, you express the opinion that legs like No. 23 cost twenty dollars per set to do them by hand, including the veneering, and that the cost without the veneering would be $13 or $14 per set, leaving the price of veneering $6 or $7 per set. Is that judgment based upon the cost of veneering twenty years ago, and upon the cost of doing the other work twenty years ago?

(Objected to as already clearly answered as to the cost of veneering and doing the other work twenty years ago.)

Ans. I should like to amend my answer to this by putting the price at $25 per set. The cost of the fitting alone, without veneering, would be $13 or $14, and of the veneering $11 or $12. I mean, taking the cost of veneering twenty years ago. We used to pay for veneering No. 37, or exhibit "Hinckley," eight dollars seventy-five cents a set, when we first veneered them, and after that eight dollars. There is all that difference in the cost of veneering the respective legs No. 23 and No. 37. I estimate the cost of fitting, too, as of twenty years ago.

Direct resumed:

Int. 1. What experience have you had, if any, for the last twenty years in fitting wood to cauls for the purpose of veneering it?

Ans. I haven't had much experience in the actual fitting myself, my business has been to oversee. I have seen all the fitting and veneering that has been done in the shop for the last twenty years, with the exception of one year that I was absent on account of sickness.

414 Int. 2. Please read the sixteenth cross-interrogatory and your answer, and state whether your judgment is affected at all, and if so, how, by taking into account the smaller amount of surface there spoken of?

Ans. It is not affected at all by that.

Int. 3. What effect upon the labor of fitting those legs does the difference between the number of lines to be followed have? I mean in the four-square and eight-square.

Ans. As far as making a straight line, it would be just double the amount, but in working out the squares, taking the whole, it would be just about one-third more.

Int. 4. What, in your judgment, would you be obliged to pay to veneerers employed by McPhail & Co. for veneering legs like No. 23 and No. 37 on exhibit "Hinckley," at this time?

Ans. Owing to the advance of labor we should have to give twenty-five per cent. more than we did twenty years ago, to get them done.

Int. 5. You say you estimate the cost of fitting twenty years ago of No. 23, (fitting by hand, I mean,) to be $13 or $14 per set, how much would it be now?

Ans. Twenty-five per cent. more, probably.

JAIRUS A. FROST.

Deposition of George A. Hinckley.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is George A. Hinckley; age, 49; residence, Newton, Mass.; occupation, pianoforte maker.

Int. 2. Where did you work between 1840 and 1844, and what work did you do?

Ans. I worked for Lemuel Gilbert, 416 Washington street, at that time. During that time I worked upon what are called the skeletons of the pianoforte, and legs.

Int. 3. What kind of legs were you at first occupied upon?

Ans. Upon what we call the four-square—its sides being four plane squares tapered towards the foot, and a hollow at the top and bottom.

Int. 4. When did you begin to make what is called the ogee leg? and state fully just what the surface of that leg is like, and what work you did upon it.

415 Ans. I should think in the year 1844. I took the plank in the rough, glued it up in the first place of sufficient size for the leg, planed it out, marked my ogee pattern upon it, and sent it to the mill. After being sawed by a gig saw up to my ogee line it was returned to me, and I worked it out carefully with my smoothing plane, rabbet plane, and rasps, to get the surface ready for the veneers. I then had to fit the cauls to the surfaces of the legs, working down the cauls to fit the surfaces, so that we might press down the veneering. Of course no two surfaces of the leg were exactly alike, and the caul had to be fitted to each surface, which was done by working down the caul with a plane or rasp.

Int. 5. How much wood was left by this gig saw to be worked off on an average, and why was it left?

Ans. I should say from an eighth to a sixteenth of an inch, varying with the condition of the saw; no dependence upon those saws for exactness.

Int. 6. How long would it take to fit a set of the four-square plain leg to get it ready for veneering?

Ans. I hardly know how to answer. I think I used to call the work a little less than half done when they were ready fitted for the veneering, and it took me about five days to fit and veneer a set.

Int. 7. How much a set did you get for those four-square legs?

Ans. Nine dollars a set, if I remember aright.

Int. 8. How long did it take for the ogee legs? and how much did you get?

Ans. It was a week's work to make a set. I think I had twelve dollars for the ogees per set.

Int. 9. Was working down these faces to fit the caul easy, or hard, or ordinary work.

Ans. It was difficult and discouraging work; I so considered it.

Int. 10. Did you ever make a set of four-square legs with a view to ascertain the proper price to be paid for that work? and if so, state why this was done, giving all the circumstances.

(Objected to as leading.)

Ans. I did make a set for Gilbert, I think, at the request of his foreman, Mr. Frost, because Gilbert had found fault with the high cost of the legs; he thought they were costing too much. I remember Mr. Frost told him that he ought to be satisfied with the result of my making that set, and charging nine dollars; that he should be satisfied with the price.

Int. 11. Were these ogee legs that you made all four-square, or were any of them octagonal?

Ans. They were all four-square. I think we never undertook to make them eight-square, as we called it.

416 Int. 12. Did the introduction of machine legs make any change in the style, of legs? If so, what change?

Ans. Yes, sir, it did. It gave us the eight-square ogee leg—the first ones I ever saw—and more graceful forms of the ogee, the hollows and rounds.

Int. 13. Look at Nos. 20, 28, 29, 22, 23, and 31 and 33 on the pattern card now shown you marked "Hinckley, N. A. P., examiner," and state whether, in your judgment, such legs could be made as you have described the method of making the ogee legs; and if so, what the cost of making them would be.

Ans. I don' see any leg here but what might be made by hand, but it would be a very slow process, and would cost, in my judgment, from fifteen to thirty dollars a set.

Int. 14. How much more, in your judgment, would it cost to make an eight-sided ogee leg than a four-sided one of the same pattern?

Ans. I should suppose it would be about half more work to prepare the work for the veneering. There would be four more surfaces, and it would be a very accurate and difficult piece of work to do.

Int. 15. How does a leg fitted for veneering by hand compare, as to finish, silmilarity of style, &c., with one planed on a leg machine?

Ans. The hand leg is inferior every way.

Int. 16. Please point out some of the respects in which it is inferior.

Ans. The machine leg is exact in every square—all alike. It is a very difficult thing to work them by hand and have them all alike. In sawing them with a gig saw, the saw is apt to run in and out, and consequently you are obliged to reduce your leg to get a proper surface, and that destroys its exactness oftentimes.

Int. 17. What was the fact as to this, in your actual experience, in making ogee legs by hand?

Ans. They were inaccurate in their surfaces. By measurement you would discover inaccuracies which do not exist in the machine leg.

Cross-examination:

Cross-int. 1. How many sets of ogee legs did you make in 1844?

Ans. I've no recollection as to the number, whether a dozen sets, or more or less; I don't know how long I worked upon them in '44.

Cross-int. 2. How many have you made since that time?

Ans. I don't know that I've made any; I don't know but I have; I know that about that time I worked on those legs.

417 Cross-int. 3. All your practical experience, then, as to the cost of making them, is what you had at that time, is it not?

Ans. I should suppose that I might have had experience all along from 1842 to 1846.

Cross-int. 4. I mean your practical experience in making ogee legs.

Ans. I cannot locate the time exactly; I should think in 1844.

GEO. A. HINCKLEY.

Deposition of Alexander W. Amsden.

JANUARY 23, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Alexander W. Amsden; age, 33; residence, Dana, Massachusetts; occupation, now turner.

Int. 2. Did you go to Mr. Rufus Powers, in Prescott, to see a machine like the model now shown you, marked "Powers No. 2"? If so, state when, and who went with you.

Ans. I did, I think in August. Mr. Goodman and Mr. Hale went with me.

Int. 3. Please compare the machine you then saw with the model marked "Powers No. 2," and state fully and particularly how it differs, if at all, from that model.

Ans. The dial had but six holes in the machine. The spring operating upon the dial had a hole corresponding to the holes in dial. By the spring I mean the handle that turns the centre. The handle also had a hole further out from the dial, in order to catch upon two pins. The centre had but one lip or spur. The piece that held the spindle had two holes in it, (I mean the wooden piece in the model through which the spindle passes,) and was of iron in the machine, one hole being above the other.

Int. 4. What was the shape of the head piece of the carriage in the machine?

Ans. The top part of it was level, or nearly level, with the sides. The two sides and the lower end were as in the model.

Int. 5. How were the holes arranged in the machine?

Ans. They were spaced into eighths of a circle placed in such position that a piece taken from the top of the head-piece extracted two-eighths of the circle.

418 Int. 6. How would that bring them in reference to a horizontal line drawn through the centre of the spindle?

Ans. It would bring them in such position that they would be one each side of the line; a sixteenth of a circle from the line.

Int. 7. How does that differ from the model?

Ans. A line drawn horizontally through the centre of the spindle in the model would strike one of those holes each side of the circle.

Int. 8. Were there any pins in the head-piece of the carriage not shown in the model? and where were they placed?

Ans. There were two pins, one each side of the centre, horizontal with the centre, placed about three-fourths of an inch outside of the dial or circle of holes.

Int. 9. What was the purpose of these pins, if you know, and how did they correspond with either of the holes in the handle?

Ans. They were placed in position to correspond with the outer hole to hitch the handle on, to turn it half over and hold it.

Int. 10. Please look at the exhibits marked "4," "5," and "6," especially with reference to the marks of the centres in their ends, and state whether those marks correspond or not with the centres you saw on the machine at your first visit.

Ans. They do not. The upper centre had but one lip or spur; on these exhibits there is an impression of two; of the other end, the centre that I saw in the machine was considerably smaller—I think about three-eighths in diameter. It was sharpened like the centre in the model, or nearly so.

Int. 11. Did you examine the holes in the head-piece and the hole in the handle corresponding with them, and how often, with a view to ascertain from their appearance how much they had been used and how long they had been made, and what conclusion did you come to in these respects?

Ans. I did examine the holes with that view three times, I think, at the first visit. I took them to the window and looked into them, and they looked new and bright. I concluded that they had not been used at all. I don't know as I could tell you how long they had been made, but perhaps a month.

Int. 12. What was the head of the carriage made of?

Ans. Pine.

Int. 13. Does a hole bored in pine differ in its appearance after having been bored ten or twelve years from one bored in the same wood from six months to a year?

Ans. It does.

Int. 14. How? State fully and particularly.

Ans. It becomes darker in color.

419 Int. 15. Is this difference enough to enable you to testify after seeing a hole, bored in pine wood, whether it was bored six months or a year, or ten or twelve years previous?

Ans. It is.

Int. 16. When did you next see this machine, if you saw it a second time, and who went with you to see it?

Ans. On or about the 12th of this month, Mr. Hale, (Warren,) his

son Henry, Allen Goodman, his son J. W. Goodman, and Stephen Witt.

Int. 17. Please state, fully and particularly, how it differed, if at all, the second time you saw, from the first time you saw it.

Ans. The centres were each of them different; the head centre was larger, with lips or spurs put on to the centre, instead of the spurs being drawn out from the same piece of iron or steel; the lower centre was larger, with a shoulder turned on it about an inch from the end, the shoulder making an impression five-eighths of an inch in diameter. The dial or index upon the head of the machine was divided into eighths of a circle, placed in such position that a piece drawn from the top extracted three of those holes instead of two. The piece upon the head of the machine, upon the second examination, appeared to be made of white maple; the first that I saw was made of white pine.

Int. 18. How did the head of the carriage, which you saw at your first visit, differ in shape, if at all, from the one you saw at your second visit?

Ans. No way, excepting the position of the holes and their number in the dial that I recollect.

Int. 19. Were there any pins in the head of the carriage? If so, how did they differ, if at all, from the pins you have spoken of?

Ans. There were two pins there. I didn't discover any difference in those.

Int. 20. What did Mr. Powers represent the machine to be that you saw at your first visit?

Ans. The same as it was when he cut the pieces that were on exhibition at Boston in this case.

Int. 21. What was it that you, or the gentleman with you, asked him to let you see?

Ans. The machine that he promised to let me see.

Int. 22. What did you ask to see the second time?

Ans. I was not present when Mr. Hale asked him the question.

Int. 23. What did Mr. Powers say, if anything, while you were examining the machine, as to that being the machine about which he had testified, and as to any changes since you had before seen it?

(Objected to.)

420 Ans. He said it was the same machine, and as it was when we examined it before.

Int. 24. How many holes did the handle you saw the second time have?

Ans. Two.

Int. 25. Please look at the exhibits Powers "4," "5," and "6," especially at the marks on their ends, and state, if you know, what made those marks, and for what purpose they were made. I refer to all the marks, except those made by the centres.

Ans. The marks were apparently made by a bench hook, to hold the legs for the purpose of planing.

Int. 26. Do you mean for the purpose of planing them on the machine? If not, please state fully what you do mean.

Ans. Planing them for the purpose of making it easier for the machine to cut them; I mean with a common hand plane.

Int. 27. What do you believe to be the purpose of the circular marks on the tops of exhibits Powers Nos. "5" and "6?"

(Objected to.)

Ans. To designate the size to plane them to before cutting.

ALEXANDER W. AMSDEN.

Second deposition of Allen Goodman.

JANUARY 24, 1865.

Int. 1. Have you been before examined in this case?

Ans. I have.

Int. 2. Did you go to Mr. Rufus Powers, at Prescott, to see the machine like the model now shown you, marked "Powers No. 2?" If so, state when first, and who went with you at that time.

Ans. I did, in August, I think; Mr. Warren Hale and John W. Goodman went with me. We saw Mr. Rufus Powers, and he refused at first to let us see the machine that he had testified of. Mr. Hale told him that he had agreed while here at Boston to let us see the machine. He said he couldn't afford to spend his time for nothing, but finally consented to let us see it if we would pay him a dollar.

Int. 3. Please compare the machine you there saw with the model marked "Powers No. 2," and state fully and particularly how it differs, if at all, from that model.

421 Ans. It differs in some respects. On the head end of the carriage there appears on the model to be a full circle divided into eight spaces. On the machine there was only part of a circle; the upper part of the circle was not there. I don't know as I can state positively the number of holes on the machine when I first saw it. I thought there were two holes gone from the top of the circle. As I was looking at the head of the carriage I saw that the holes looked very bright and new, which I expected would look otherwise on an old machine. I took it to the window and looked into the holes. They looked to me as though they hadn't been used. Also in the handle there was a hole through it which looked new, corresponding to the holes on the head of the carriage, and some quarter or three eighths of an inch further out on the handle was another hole; in the head of the carriage were two pieces of iron so arranged as to divide the circle. There was this difference in the box that holds the spindle, that in the machine there was an extra hole in the iron above the spindle. I should say the centres in the model resembled those in the machine very much.

Int. 4. What was the shape of the head-piece of the carriage in the machine?

Ans. It was very nearly level with the side-pieces of the carriage.

Int. 5. How did its shape resemble or differ from the tail-piece?

Ans. I don't recollect particularly about the tail-pieces. I should think they were about alike.

Int. 6. What was the purpose of the pins you have spoken of in the head of the carriage?

Ans. I suppose to turn the work half way over, and fasten or hold it.

Int. 7. What kind of work would be made when these pins were used?

Ans. It would cut only two sides of the work.

Int. 8. When did you next see this machine, if you saw it a second time, and who went with you?

Ans. I think it was about the ninth of this month. Mr. Alexander W. Amsden, Warren Hale, J. W. Goodman, Henry Hale, Zenas Brown, and a Mr. Woods went with me.

Int. 9. Please state fully and particularly how the machine differed, if at all, from the first time you saw it.

Ans. The holes in the head of the carriage looked older, as though they had been used considerably. I counted the holes the last time; there were but five. The spurs on the spindle looked very different to what they did at the first visit. I should think they would correspond with the spurs upon which exhibits "Powers 4," "5," and "6" were held. That's the best of my recollection about it.

422 Int. 10. How did the head of the carriage, which you saw at your first visit, differ in shape, if at all, from the one which you saw at your second visit?

Ans. I shouldn't think there was much difference in the shape.

Int. 11. Were there any pins in the head of the carriage? If so, how did they differ, if at all, from the ones you have spoken of?

Ans. I don't recollect any difference. They were placed about the same.

Int. 12. Please examine carefully exhibits "Powers 4," "5," and "6," and state whether one caul would fit the eight sides of any one of those exhibits.

Ans. It would not; some faces would fit better than others.

Int. 13. What did Mr. Powers represent the machine to be that you saw at your first visit?

(Objected to.)

Ans. The machine that cuts these exhibits.

Int. 14. What was it that you asked him to let you see?

Ans. The Powers machine No. 2.

Int. 15. What did you ask to see the second time?

Ans. I asked to see the same machine.

Int. 16. Please examine exhibits "Powers Nos. 4," "5," and "6," and state how they were prepared for the machine, if you find any indications of that upon the exhibits.

Ans. They have more appearance of having been planed by hand planing, but they might have been turned in a lathe. They look as if they had been turned and then planed.

Int. 17. What is the indication that leads you to believe that they were turned and then planed?

Ans. In exhibit No. 4 you see the mark of the turning tool upon the angles of the work, and all three of the exhibits show the marks of the bench hook, and this leads me to believe that they were planed by hand.

Int. 18. What do you believe to be the purpose of the circular marks or tops of exhibit "Powers 5 and 6"?

(Objected to.)

Ans. I should think they were put in there to work the hand plane by, so as to get them down as small as they could, and have them work in the machine. It would leave less labor for the machine to perform.

Int. 19. Mr. Powers speaks of "planing saw-frames, the middle pieces." Would any index be required or not to make any parts of saw-frames?

Ans. I should think not.

423 Int. 20. What part of that machine would be used for making sash and door work?

Ans. The cylinder and table.

ALLEN GOODMAN.

Second deposition of Warren Hale.

JANUARY 31ST, 1865.

Int. 1. Please read the eighteenth direct interrogatory and answer of Chas. S. Chamberlin, and state what conversation you had upon the matter there spoken of, and what your real intention then was of going into the business at Westfield.

(Objected to.)

Ans. I deny ever having any such conversation with any one, and I never had any intention of going into business there.

Int. 2. Please state what conversation you had, if any, at Westfield, upon that subject, and state the time as nearly as you can.

Ans. I recollect no conversation with any one on that subject.

Int. 3. Did you see a leg cut upon the Oaks machine when you first went to Westfield, or at your second visit? If so, state what conversation you had with any one as to the working of the machine, and as to whether it would infringe the Hale & Goodman patent or not.

(Objected to.)

Ans. I did see a leg cut on my first visit. My impression is, that I asked Mr. Bosworth if he didn't think it infringed upon the Hale & Goodman machine. His answer was that he didn't think it did.

Int. 4. Please read the twelfth direct interrogatory and answer of Mr. William Stimpson, and give your account of the conversation there testified to, if you had any such conversation.

Ans. Mr. Stimpson came into my door-yard I think the very day that Mr. Fales went to Westfield to make the first payment. He

wanted to know what it meant, our sending George T. Johnson and Lindsay after his sons dogging them round. I told him that we sent them to see our property there, and that we would take it off of their hands if they would step out; that these men were sent to Westfield for that purpose. Mr. Stimpson then flew mad at once, called me everything he could think of; said he, "You're a fool; you don't
424 know anything; there's your brother Lorenzo—he is a man."
These are the words as near as I can recollect. There was considerable more said in the way of flinging that I can't now call to mind.

Int. 5. Please read the answer of Mr. Benjamin N. Bullock to the fifteenth and sixteenth direct interrogatories, and sixth, seventh, eighth, and ninth cross-interrogatories, and state whether he ever made the report to you as there testified; when that suit was begun and when first tried, as nearly as you recollect; when you left Dana, and whether you saw Mr. Bullock after you left and before you returned to Dana to live.

(Objected to.)

Ans. Mr. Bullock never made any such report to me; I left Dana about the 20th November, 1851; I did not see Mr. Bullock after I left and before I returned to Dana to live; the suit was begun as near as I can recollect in November, 1850. The suit was first tried in 1853.

Int. 6. Did you ever see a machine in North Royalston for planing chair backs and legs for Grecian chairs? If so, state when.

Ans. I never did; I never was in the town except as I passed through in the cars.

Int. 7. When did you first know of the Hayward machine?

Ans. I knew of it, by report, about the time our suit was commenced in New York; I never saw the machine.

Int. 8. When did you first see a model of it?

Ans. About a year or a year and a half ago, in Mr. Chauncey Smith's office, in Boston.

Cross-examination:

Cross-int. 1. At the time of your first visit to Westfield, did you see Mr. Chas. S. Chamberlin?

Ans. I might have seen him; I've no recollection of it now; I was there but a very short time.

Cross-int. 2. When was your recollection first directed to the conversation stated by you in answer to your fourth interrogatory, after it took place?

Ans. I think it was when Mr. Stimpson was examined in Boston.

Cross-int. 3. Were you not somewhat excited during that conversation?

Ans. No, sir, I laughed at him heartily.

Cross-int 4. Have you, in your answer to said fourth interrogatory, stated all that conversation?

Ans. No, sir, that would be impossible for me to do.

Cross-int. 5. By whose report did you first know of the Hayward

machine, as stated in your answer to the seventh interroga-
425 tory?

Ans. I am unable to say; my impression is that it was from Mr. Nelson Bosworth.

Cross-int. 6. Was that report a full report in regard to its principles of construction and operation?

Ans. Not to my mind it wasn't.

Cross-int. 7. Have your transactions and conversations in regard to the Hale & Goodman patent, its connexions and relations to other patents, been frequent and with various parties?

Ans. Of late they have.

Cross-int. 8. Was not that the case to a considerable extent when the New York suit was pending?

Ans. Not with me, as I was away most of the time.

Cross-int. 9. May you not have forgotten such transactions and conversations which may have taken place?

Ans. I've no doubt that we did discuss the matter at the time of commencing the suit; I recollect no conversations at that time; it is certainly possible that I may have forgotten some of the conversasations with regard to the patent.

WARREN HALE.

Third deposition of Allen Goodman.

JANUARY 31ST, 1865.

Int. 1. Have you given a deposition previously in this case?

Ans. I have.

Int. 2. Do you know Mr. Charles S. Chamberlin who has testified in this case? If so, please state when he was born, and how you you know that fact?

(Objected to.)

Ans. I know him; I have a record here that his mother said was regularly kept of the family, and that it was a true record; I think she said it was taken from the Bible; it states that he was born March 11th, 1832.

(Ans. objected to.)

Int. 3. State generally what else that record contains.

(Objected to.)

Ans. It appears to contain the birth of Amasa Chamberlin, of his wife, and his children.

(Ans. objected to.)

426 Int. 4. Will you annex that record to your deposition? If not, why not?

(Ans. objected to.)

Ans. Mrs. Chamberlin wished me to return it again.

Int. 5. Please read the sixth, seventh, eighth, and ninth direct interrogatories contained in the second deposition of said Charles S. Chamberlin, in this case, and give your account of the conversations there referred to, if you ever had any such.

Ans. I don't recollect any such talk as that mentioned in answer

to the sixth interrogatory; I think it must be a mistake, for I always considered it an infringement of the original machine, that is, the Hale & Goodman invention; I never acknowledged that the Oaks machine was superior to the Dana machine; I never saw its superior yet. I had some talk with Oaks before trying to form the company at the time of the Westfield purchase; I think that he and Charles Stimpson came to my house a day or two before we met to form the company; they thought I'd better hold on to my right, and said they had had talk of leaving me out in forming the company, if they couldn't succeed in forming the company and getting me in; it was talked of taking my interest in the patent and starting some other place; they spoke of this Westfield property at the time; I think Oaks spoke of it first, and thought we'd better try to form a company there and buy the Westfield property, and if I held on to my right we would have the right to manufacture anywhere; I think in the conversation with Chamberlin that there was some conversation about Mr. Lindsay being brought in as one of the parties, and that I told Mr. Chamberlin something like this, that C. N. Stimpson did not know that they were going to take Lindsay in, and as long as that was so, I didn't blame the Stimpsons so much for objecting; that's all I recollect of that conversation.

Int. 6. Please read the thirteenth and fourteenth interrogatories and answers of Mr. Albert Bosworth, and state whether you were in Westfield in 1856; and if so, whether you saw the Oaks machine. If you did not see it, please state why not.

Ans. I was there, but I couldn't tell the date, whether in '56 or not; I've no recollection of seeing the Oaks machine when there; I asked to see it and was refused, he about came to the conclusion once that he would let me see it, and I think went to the door and unlocked it, then said he had concluded that he would not let me see it.

Int. 7. When did you first see the Oaks machine?

Ans. About the time that Hale & Co. was formed, I think; it might have been after; I think it was after.

Int. 8. Please read the fifth and sixth interrogatories and
427 answers of Benjamin N. Bullock, and state what you recollect of the conversation there referred to.

Ans. I don't recollect near all that conversation. I recollect being with Mr. Bullock and Mr. Hale in a buggy, and know that there was some talk of the patent or of the suit. I don't recollect anything being said about the Heywood machine. If there was, it must have been this cam machine that was spoken of at that time, which he calls the Goodman machine, but I had never seen or heard of the Heywood machine when we got up the first machine or Hale & Goodman machine.

Int. 9. Please read the deposition of William Holt, and state what you know of the conversation there referred to.

Ans. I know of no such conversation at that time.

Int. 10. If you had any similar conversation afterwards please state it.

Ans. In the fall of 1846 I had a similar conversation with several persons, I couldn't say certain whether he was one or not.

Int. 11. If you said that you had seen a machine in North Royalston for planing chair backs and legs for Grecian chairs, what machine did you refer to and when did you see it?

Ans. I saw no such machine in North Royalston; I saw a machine in Gardner, I should think in August or September, 1846, for planing chair backs. That was the first I ever knew of such a machine.

Int. 12. Mr. William N. Oaks, in his second deposition, has testified, in answer to the ninth interrogatory, about a conversation which he and Charles N. Stimpson had with you at Dana and at Westfield, after the purchase at Westfield, and after the forming of Warren Hale & Co., relative to your going into the concern at Westfield. Please state whether you ever had any such conversation with either William N. Oaks or Charles N. Stimpson, and whether, if you had, it was before or after the firm of Warren Hale & Co. was formed, and what it was.

Ans. I had a conversation with them before the company of Warren Hale & Co. was formed, and do not recollect having any conversation after. That conversation was the one stated in my answer to the fifth interrogatory.

ALLEN GOODMAN.

428 *Second deposition of J. F. Chamberlin.*

JANUARY 31ST, 1865.

Int. 1. Have you already given a deposition in this case?

Ans. Yes, sir.

Int. 2. State again, if you please, fully, how the lever upon the Oaks machine is used in the operation of that machine.

Ans. We always use it to raise the cylinder from the patterns to let the carriage run back, and to set the knives on to the leg, and run the carriage back to cut backwards down into the curves. I sometimes used it to ease the rolls up steep curves.

Int. 3. Which machine did you use first, the Oaks machine or the Dana machine?

Ans. The Oaks machine.

Int. 4. Before making your first answer, had you heard the statements contained in the depositions of Frank W. Chamberlin, Wm. N. Chamberlin and Charles S. Chamberlin, relative to the proper use of that lever?

Ans. I had.

Int. 5. Did you ever tell Frank W. Chamberlin, or ever say to any one, that you had contracted the habit of using both hands by working upon the Dana machine? Had you, in fact, ever worked upon the Dana machine until after you worked at Westfield under Mr. Wm. N. Chamberlin?

Ans. I never told him or any one that. I never had worked upon the Dana machine until after I worked at Westfield under Mr. Wm. N. Chamberlin.

Int. 6. What is the habit of other workmen, especially of Mr. Wm. N. Chamberlin, as to using that lever?

(Objected to.)

Ans. When I saw him work, he used it the same as I did, and for the same purposes. Others use the lever in the same way.

Int. 7. In your first use of that machine, who was foreman of that department?

Ans. Wm. N. Chamberlin.

Cross-examination:

Cross-int. 1. Had you ever worked upon any machine for planing irregular forms before you worked upon the Oaks machine?

Ans. No, sir.

429 Cross-int. 2. Have you examined the Oaks machine since you gave your last deposition?

Ans. No, sir.

Cross-int. 3. Did you, in your last deposition, give substantially the same description of the operation of the lever in the Oaks machine that you have now given?

Ans. I think I did, as near as I can recollect.

J. F. CHAMBERLIN.

Deposition of Alpheus J. Nye.

JANUARY 31, 1865.

Int. 1. Have you already given a deposition in this case?

Ans. I have.

Int. 2. State again, if you please, fully, how the lever upon the Oaks machine is used in the operation of that machine.

Ans. It is used for two purposes; one to clear the cylinder from the leg while the carriage is running back; and oftentimes to raise the cylinder from the leg for commencing at a point forward and cutting back. And I used occasionally to bear a little weight upon the lever to assist the rolls in going up sharp turns.

Int. 3. Before making the above answer had you heard the statements contained in the depositions of Frank W. Chamberlin, Wm. N. Chamberlin, and Charles S. Chamberlin, relative to the proper use of that lever?

Ans. I had.

Int. 4. Did Charles S. Chamberlin ever come to you and complain that you had made the work so ridgy that it was difficult to veneer it properly, and explain to you that your use of the lever had caused that defect in the work, or did any other person ever make similar complaints, or give a similar explanation of the reason, or did Charles S. Chamberlin, or any one else ever make any complaint or explanation the same in substance as that above mentioned?

(Objected to.)

Ans. I've no recollection that Charles S. Chamberlin ever said anything to me about it. I don't know that any one else ever made such complaints or gave such expalnation.

Int. 5. Did you ever tell Frank W. Chamberlin or ever say
430 to any one that it was a habit of yours to use the lever on the Oaks machine to ease the cutter up the steep inclines, contracted by working upon the Dana machine? If so, had you such habit, and what was the effect upon the work?

(Objected to.)

Ans. I've no recollection of ever saying anything to Frank Chamberlin about it in any way. I couldn't say whether I ever told any one that it was a habit contracted at Dana, to use the lever to ease the machine up the steep inclines, but I invariably did, in cutting legs where the curves were short, bear weight upon the lever to assist the rolls in going up steep places; unless you bear weight enough so that the rolls leave the pattern, in these cases it would make the work perfect. That I didn't intend to do—to make the rolls leave the patterns.

Int. 6. What was the habit of other workmen in this respect, especially of Wm. N. Chamberlin?

(Objected to.)

Ans. I couldn't say whether he bore weight upon the lever or not. I never saw any other man cut, to make any business of it.

Int. 7. Where did William N. Chamberlin keep his left hand, commonly, during the operation of cutting a leg?

(Objected to.)

Ans. The principal time upon the lever.

Int. 8. Did you ever see Mr. Wm. N. Chamberlin use the lever to move the cutters to a point forward and cut back? If so, how frequently? State, generally.

Ans. Often.

Cross-examination:

Cross-int. 1. Have you examined the Oaks machine since you gave your last deposition?

Ans. No, sir.

ALPHEUS J. NYE.

431 *Deposition of Stephen Witt.*

JANUARY 31, 1865.

Int. 1. State your name, age, residence, and occupation.

Ans. Stephen Witt; age, twenty-four; residence, North Dana; occupation, mechanic.

Int. 2. Do you know Frank W. Chamberlin, or have you ever seen him cut legs upon the Oaks machine?

Ans. I do know him and have seen him cut legs upon the Oaks machine.

Int. 3. Where does he commonly keep his left hand in cutting legs upon that machine?

Ans. Upon the lever.

Int. 4. State, generally, how often you have seen him cut legs, and what your opportunities have been for seeing him.

Ans. I worked for Mr. Stimpson some six months or more. I should

think I had seen Frank Chamberlin cut legs every few days, or every day, perhaps, during that time.

Int. 5. Did any other man cut legs on that machine while you worked for Stimpson & Co.

Ans. I don't remember seeing any other man.

STEPHEN WITT.

Deposition of Nelson Bosworth.

JANUARY 31, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Nelson Bosworth; age, sixty years; residence North Dana, Mass.; occupation, mechanic.

Int. 2. Do you recollect driving to Royalston and Gardiner with Mr. Goodman, shortly before he obtained his cam machine patent? If so, state when and how you went, and for what purpose.

Ans. I do. It was in the summer of '45 or '46.—I think '46. We went with a horse and buggy, for the purpose of examining the chair machine, or ascertaining whether there was one there or not. It was not known certainly, at Dana, whether there was or not.

Int. 3. Where did you go first, and what did you do there?

432 Ans. We went to south Royalston, and made inquiries with regard to the machinery used in chair shops.

Int. 4. Where did you go after that?

And. To Gardiner, to Wood & Haywood's shop.

Int. 5. On your way over did you talk with Mr. Goodman? and if so, what did he say as to having before seen the Haywood machine?

Ans. I recollect of having a conversation with him before we started, on that subject, but I dont know that anything was said on the way.

Int. 6. What did he say then?

Ans. Justin Stacy had stated, at North Dana, that there was a machine at some chair shops similar to the one they were using in Dana, that is, the Hale & Goodman machine. There was a doubt in his mind whether there was such a machine in existence, and we went to ascertain the truth of it.

Int. 7. On your way back did you have any conversation with Mr. Goodman as to whether the said machine was the same as the Dana machine? If so, state what it was.

Ans. I think Mr. Goodman expressed the opinion that it wasn't similar. That it wouldn't injure the patent.

Cross-examination:

Cross-int. 1. State, if you please, when you first saw the Gardiner machine.

Ans. I saw it at that time.

Cross-int. 2. State whether you ever gave to Warren Hale, the complainant, a description of that machine.

Ans. I've no doubt but that I reported to him, after our return, what we saw. I've no particular recollection about it, but should think very likely I did.

NELSON BOSWORTH.

433 *Deposition of Joseph B. Crosby.*

MARCH 1, 1865.

Int. 1. What is your name, age, residence, and profession? and have you previously testified in this case?

Ans. Joseph B. Crosby; age, 36; residence, Boston; profession, solicitor of patents and mechanical engineer. I have previously testified in this case.

Int. 2. Will you look at the models specified as follows, and state how far, in your judgment, they substantially agree with or differ from the machine described in the reissue patent of Hale & Goodman, and represented by exhibit "Hale & Goodman, Exhibit 1, N. Austin Parks, ex'r"?

1st. The model marked "Hayward E, Merwin, U. S. C."

2d. Exhibit "Springfield No. 1, H. F. S., ex'r."

3d. Exhibits "Wheeler, No 1, 1840, H. F. S., com'r," pieces A and B; "Wheeler No. 2, H. F. S., com'r," and "Wheeler No. 3, H. F. S., com'r," pieces A and B.

4th. Models marked "Powers No. 1, H. F. S., com'r."

In connexion with the examination of the exhibits, please refer to the depositions already given in the case for an explanation of their construction and mode of operation.

Ans. The "Hayward" machine is an organization by which a flat surface of irregular outline in its longitudinal direction is produced by the action of a rotating planing cutter; the outline produced being coincident with the pattern forming a part of the machine. To effect this purpose the piece to be cut is rigidly fixed to a carriage which can be made to travel back and forth under the cutter, its direction of motion being guided and controlled so as always to be at right angles to the axis of the cutter. This carriage has secured upon it on either side a pattern, the outline of which is to be reproduced on the work which is clamped to the bed. The cutter is made so that it can approach and recede from the bed, being secured in a frame which has tracing rolls connected therewith, and it is the contact of these with the patterns which causes the rise and fall of the cutter as the patterns are drawn along, the weight of the frame and its attachments insuring contact between the pattern and the tracing roll. I find all that I have described in the Hayward machine in the Springfield machine, with the exception that the carriage in the "Springfield" machine is made to move toward and from the cutter, instead of the cutter being made to move toward and from the carriage, as in the Hayward machine.

434 The difference which I find between these two machines and the machine "Hale & Goodman Exhibit 1," is this: In "Exhibit 1" exists means for holding the work so that it may be turned on centres on an axial line, and held in any desired angular position. This enables the operator of the machine to produce polygonal forms, with any desired number of sides, without measurement or care in adjustment, and with great facility; the faces produced being at similar points throughout, the regular polygon made being

equidistant from the axis of the polygon. To produce these different polygonal faces, the block of wood is not removed from its fastening to the carriage. The whole stress exerted by the cutter is received upon the centres, or dogs, which support the work and by which it is held to the carriage. In the "Hayward" machine but one irregular longitudinal face can be cut without removing the piece of wood from the dogs and from the carriage, so as to readjust it. The organization of the machine shows that it is intended to cut but one such face, there being a groove in the carriage in which the work is imbedded, the bottom of the bed receiving the downward action of the cutter, the sides of the groove preventing movement of the piece laterally, and the dogs preventing endwise movement thereof. To produce a pianoforte leg on this "Hayward" machine, such as can be produced on the "Hale & Goodman" machine, that is, a regular polygon of many faces but of irregular longitudinal section or profile, a vast amount of care would have to be expended in securing the block to the carriage to produce the first face of the leg. After this was cut the block would have to be released from its fastenings and readjusted with the exercise of care and careful measurement to secure the proper angular position of the second face, and so that its distance from the common axis should be the same at similar points with the face before cut, and this operation would have to be repeated for each other face produced in the formation of the leg. Failure to have the axial line in the same position exactly while cutting each face, both as regards endwise and vertical measurements, would make a distortion in the leg as to its symmetry. Thus to produce a pianoforte leg would be practicable, but not practical. The same remarks apply to the "Springfield" machine, and in both, the mode of fastening, or the dogs, would have to be modified.

Referring to exhibits "Wheeler No. 1" and "Wheeler No. 3," and to the description of the manner of their use in Wheeler's deposition, I find an organization of a carriage provided with means for holding the block on centres and for turning and confining it on those centres, or on an axial line, and for confining it in any desired angular position; the carriage being also provided with longitudinal patterns corresponding to the contour of the object to be cut. There is also a rotating planing cylinder arranged to be driven like a piece of work on the centres of the lathe; rotation being given to the planing cutter-head, the block being secured in its fastenings to the carriage, the operator carries the work and carriage across the cutter and its shaft (as nearly as he can) at right angles thereto, the patterns bearing on this cutter shaft; and thus one face of the polygonal object is formed. The block is then turned on the centres and secured by the index, and another and similar face of the polygon is formed by a repetition of the preceding manipulation. These differ from the "Hale & Goodman" machine in that there is no automatic or mechanical guidance of the carriage so as to keep it in its movement always at right angles to the axis of the cutter, departure from which condition will produce a figure distorted from that intended to be made, which distortion, if the object is small, may be

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slight, but if the object is large and heavy would be increased, and would be material, especially if the object were a pianoforte leg, which must be veneered, and the good veneering of which would depend on the accurate fitting of the cauls. These "Wheeler" organizations, while they will answer a good purpose for producing small objects like chisel handles, would not answer a practical and useful result for the production of articles so large and heavy as pianoforte legs, both on account of the great manual labor which such a use would involve, and on account of the distorted figure which would be produced by the lack of mechanical guidance of the carriage.

"Wheeler No. 2," and his disposition, show an organization by which regular pyramidal polygons may be formed by the action of a circular saw. There is shown an arbor with an index-plate, on which arbor the work is placed, and is prevented from turning by spurs in the plate. This arbor is mounted on a carriage of three parts; the upper one so that it can swivel on the second one; the second so that it can slide in the third; while the third may be moved along the saw bench. guided by the rest on the bench. The first carriage may be made to assume any desired angle with the second one. If, set to any given angle, and the carriages all stationary with respect to each other, the work on the arbor is submitted to the action of the saw rotating in the plane of the side of the carriage marked "Wheeler No. 2," by sliding all the carriages together along on the saw-bench, one side of a pyramidal polygon would be cut. If, then, the carriages are brought back to the position from which they started, the arbor and index-plate may be turned and secured, and a second face of the same polygon may be cut by a repetition of the sliding of the carriage; and so on, until the whole pyramidal polygon is completed. If the arbor is set parallel to the sides of the saw, then a prismatic polygon will be formed, but if the latch is dropped into the groove shown, and the first and second carriages are slidden upon the third carriage, I cannot conceive that the saw would operate
436 at all; or if it did operate, that it would be anything more than a feat. For this would involve that the saw must cut a curvilinear kerf or path; and the saw would bind and heat under such circumstances, so as to render the operation dangerous to the artisan and destructive to the instrument and the work.

The circular saw referred to by Wheeler, although a circular cutter, is by no means a mechanical equivalent for a rotating planing cutter head, as it cannot produce similar results, as, for example, reverse curves or re-entering curves. This "Wheeler No. 2" is not such an organization as could produce either chisel handles like those produced by his other machines, or piano legs similar to those produced by the "Hale & Goodman" machine. Wheeler's testimony is, that the groove and the latch together operated to move the work to and from the cutter, but even admitting that the whole organization would work together in that manner, but one form of curve, a generally rounded curve, could be produced thereby. Re-entering curves could not be produced thereby. Assuming that the saw rotated in the direction from the index-plate to the latch, and that the work and

carriage was moved in the direction from the latch to the index-plate, then the holding mechanism is deficient, as the action of the saw would drive the block of wood along the arbor off from the pins in the index-plate, and would leave the block free to rotate without control.

"Powers No. 1" shows an organization for producing forms of irregular longitudinal outline, with a general curvilinear cross-section. Like "Hale & Goodman," it has a carriage, pattern, and tracer, and rotating planing cutter head, and the carriage is guided mechanically in a path at right angles to the cutter axis, and the whole is dogged or held, so as to turn on centres or on an axis; and means for turning it are also shown; but the index-plate, by which the angular position of the work is determined, is lacking. This is the important difference. A minor difference is, that the carriage and work move towards the cutter, instead of the reverse as in "Hale & Goodman."

Int. 3. Please look at model "Wheeler No. 4," A, B, and C, and its description contained in the deposition of F. M. Peckham, and state what mechanical means, if any, you find for preserving the axis of the piece to be cut at right angles with the axis of the cutter, and compare it with models "Wheeler Nos. 1 and 3."

Ans. The first organization of parts described by Peckham, in his sixth answer, involves the use of everything shown in "Wheeler Nos. 1 and 3," with the addition of means by which the axis of the work is kept at right angles to the axis of the cutter. The second method described by Peckham, which includes turning the cutter frame "the other side up," involves everything as before in "Wheeler Nos. 1 and 3." with the addition of means for guiding, as
437 just stated. The third operation, in which Peckham states that the operator held the frame in his hands by the centres, "resting the tail end of it against his thighs, and stood inside of the frame-work," contains everything shown in "Wheeler Nos. 1 and 3," and substantially everything included in Peckham's two operations before alluded to; the difference being that, in said two operations, an inanimate or mechanical guide was used to preserve the relation of the axis of the work to the axis of the cutter; while in this third operation of Peckham's, he himself served as the guide, by standing and moving inside of the frame-work. In Peckham's third operation, the mechanical guide, which he used in his previous operations, is lacking; and his third operation, therefore, resembles the operations designed to be performed with exhibits "Wheeler 1 and 3."

In the fourth operation, the mechanical guide described in the first and second operations was used. In the fifth operation the mechanical guide was not used, and substantially the same operations were performed as were intended to be performed with exhibits "Wheeler Nos. 1 and 3."

Int. 4. In these models used as described by Peckham, and in "Wheeler Nos. 1 and 3," how is the weight of the block and carriage supported in each?

Ans. In exhibits "Wheeler 1" and "3," the whole weight of the object to be cut, and the carriage in which it is contained, comes

upon the guide-patterns and the equivalent for the tracing roll. In Wheeler No. 4, A, B, and C, organized and operated as at first described by Peckham, the weight of the leg and its carriage is mechanically supported. In the second operation described by Peckham, the weight of the leg and carriage holding it rested partly on mechanical guides and partly on the patterns attached to the carriage and the tracing rolls or its equivalent. In the third operation the weight was distributed, being partly borne by the operator and partly by the patterns fixed to the carriage, the proportion varying. In the operation No. 4, described by Peckham, the whole weight is mechanically supported. In operation No. 5, the weight is borne partly by the operative and partly by the pattern attached to the carriage as in operation No. 3.

Int 5. What effect, in your judgment, does the want of mechanical means for keeping the axes of the work and the cutter at right angles, and supporting the weight of the block and carriage, have as to the substantial identity or difference of the models you have examined?

Ans. For the purpose of making pianoforte legs or similar articles it makes just the difference between a practical operative machine and an impractical one which can be used merely as a feat.

Int. 6. Please compare the function of the index and centres
438 in the "Hale & Goodman" model with the function of the pawl and ratchet and centres in the model "Powers No. 1," and state what, if any, part of the first function cannot be accomplished by the second device.

Ans. In "Hale & Goodman" the index affords means for not only turning the work, but for securing it at any desired angular position, and indicating the position in which it is to be secured. The pawl and ratchet in "Powers No. 1," neither affords an indication of the angular position in which the block is to be held, nor does it lock the block in any desired position, but is simply a device by which an indefinite amount of intermittent rotary movement can be given to the block.

Int. 7. In your description of the possible method of manufacturing piano legs upon the "Haywood" machine, of what shape did you assume the rough block to be planed to be? I mean as compared with the finished block.

Ans. That it was of uniform diameter throughout, but I don't know that my answer would be modified had I assumed it to be of greater diameter at one end than the other, except that more care would be required in holding it in place in the first operation, if it had not a bearing surface on the bed along its length.

Int. 8. (De bene esse.) Please read the answers to the seventh direct and seventeenth, eighteenth and nineteenth cross-interrogatories of Mr. William C. Hibbard, and compare the machine there described with the "Hale & Goodman, Exhibit 1," and the exhibits "Stimpson, H. L. H.," and "Stimpson No. 2," and state what substantial differences you find, if any, between those machines and the models, or either of them.

Ans. The clapboard machine spoken of by Mr. Hibbard, (that one having the index and centres.) differed from the machines or exhibits inquired of in that there is no irregular longitudinal pattern found for controlling the distance of the axis of the cutter from the axis of the work. In the other clapboard machines spoken of by Mr. Hibbard there is this difference just mentioned, and a lack of the indexing and turning device. In the slabbing machines mentioned by Mr. Hibbard, there were no patterns, but they had the indexing and holding devices in some cases. So, too, the planing machines, they sometimes had the indexing and holding devices, but not the pattern nor the rotating cutter-head. The gear-cutting engines and fluting machines lacked the pattern and the control of the distances between the centre of the work and the centre of the cutter by the pattern. The pencil case lacked the rotating planing cutter-head, and the machines for cutting objects to polygonal cross-section did not have the distance between the axis of the cutter and the axis of the work controlled by a pattern. Moreover, these axes were not arranged at right angles, but were parallel with each other. In the ar-
439 rangement spoken of by Mr. Hibbard for cutting spiral gears, the pattern which he mentions has a different function from the pattern found in the "Hale & Goodman" and the exhibits inquired of. It does not, like the pattern in said exhibits, control the distance between the cutter axis and the axis of the work, but simply turns the work on its axis under the action of the cutter, but does not vary the distance between the said two axes. What Mr. Hibbard there refers to as a pattern, is in fact a movable, or moving, index plate.

Int. 9. Will you compare the "Hayward" and "Springfield" machines, the machines described in the reissued patent, and the machine represented by the model marked "Stimpson, H. L. H., U. S. com'r," as to the means of moving the cutter to and from the carriage, and explain how the difference between them in this respect compares with the difference in the methods of holding and turning the work, as affecting the character of the machines themselves.

Ans. So far as moving the cutter to the work, or the work to the cutter, as shown in these four cases, is concerned, different mechanical means are employed for effecting the same result, but the difference between devices which hold only, and devices which hold and permit turning and indexing, when introduced into a machine having a pattern which controls the distance between the cutter and the work, makes up a newly organized machine which is capable of producing with accuracy, facility, and despatch, polygonal bodies, like pianoforte legs, which can only be produced in machines otherwise similarly constructed, but lacking the turning and indexing devices, by the expenditure of much time and painstaking. In short, for the purpose of producing pianoforte legs, or similar bodies, the introduction of suitable turning and indexing devices makes the difference between a good practical machine and a machine which is good for nothing. The differences in the modes shown for controlling the distance apart of the cutter and the work, is of but very slight importance, while the

difference between mere holding devices, and devices which hold, turn, and index, are vital.

Int. 10. Please state whether, in your opinion, either of the modes shown in those four machines for controlling the motions of the cutter to and from the carriage, could be used upon all of those machines without substantial benefit or injury to the operation of the machine. And whether this is also true of the different modes there shown for manipulating the block.

Ans. The modes shown for controlling the operation of the cutter, might be used interchangeably without practically affecting the character or quantity of the work performed by the machine. The only difference would be, that one or the other mode might be easier to the operator; but this is not the case with the means which control the position of the block. As I have before stated, I am of opinion that for producing pianoforte legs, and similar articles, a machine without the turning and indexing devices is practically worthless, even where that machine has provision for the approach of a rotating cutter-head to the work, or of the work to the cutter-head.

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Int. 11. You have testified that in some of the machines, the models of which you have examined, there are means for keeping the axis of the work at right angles with the axis of the cutter, and that in some others there are not. What, in your opinion, is the relative importance of this difference, and the difference between the model "Hale & Goodman, Exhibit 1," and the models "Stimpson, H. L. H." and "Stimpson No. 2," and the other models referred to, in the manner of controlling and moving the cutter to the work, or vice versa?

MARCH 2, 1865.

Ans. The difference is of the same nature that I have heretofore testified exists between the holding, clamping, and indexing device and the various means shown for controlling the movement of the cutter to the work. Preserving the squareness of the axis of the cutter and work to each other is of vital importance in the production of work which is to be veneered like pianoforte legs, while the variations in devices for controlling the relative position of the cutter and work is a matter of but slight importance, not practically affecting the quality or quantity of work produced, involving simply, perhaps, a little more or less of convenience to the operator, or a little more or less of cost in the construction of the machine.

Int. 12. I understand that in all the models you have examined there are means, though not the same means, for controlling the movement of the cutter to and from the work, or vice versa, while in some of them there are no means for preserving the axis of the cutter and work at right angles, and in others no means for turning and indexing the block; and that you regard the presence of some means for effecting the two last operations spoken of as vital. Do you mean that the absence or presence of means for effecting the first operation is immaterial, or only that the difference between the various means shown in the models are immaterial?

Ans. I mean that the presence of some means for controlling the movement of the cutter to the work, or vice versa, is vital, but that the variations shown in the models are immaterial.

Int. 13. Please compare models Wheeler Nos. "1," "3," and "5," with each other with respect to their fitness for producing light objects, such as chisel handles; and state what, in your opinion, is the importance or necessity in those models of mechanical means for keeping the axes of the work and cutter at right angles, and for supporting the weight of the carriage and block.

441 Ans. "Wheeler Nos. "1" and "3" I consider almost identical, substantially so in all respects, and they are well fitted for the production of light articles not intended to be veneered, and where, in consequence, slight distortions from the pattern would have no effect and would not be noticeable. The weight of the work and of the parts being very light, all the manipulation of carrying the work to the cutter can be performed more quickly by hand than by a mechanical feed, and in this respect can produce work more rapidly and of sufficiently good quality for the purpose than can Wheeler No. 5. The mechanical means shown in Wheeler No. 5 for supporting the weight and for keeping the right-angled arrangement of the axes referred to, I consider unnecessary for the production of chisel handles and similar light articles, because necessarily retarding the speed of their production, and because mathematical accuracy of the product is not called for as it is in the pianoforte legs which have to be veneered.

Int. 14. Compare "Powers No. 1" and the machine described in the Powers patent referred to in the deposition of Mr. Wm. C. Hibbard, so far as the means for holding, turning, and indexing are concerned, and state what difference you find between these means.

Ans. I find in the Powers patent that the work is held on centres capable of being turned, and that there is an index and detainer which indicates the amount of rotation to be given to the work, and which holds it in a given angular position. While in "Powers No. 1" there are similar or equivalent means to those shown in the patent for holding and turning, there are no means shown for indexing the position of the work and securely holding it in the indexed position.

Int. 15. Suppose two blocks of wood, which were to be made into piano legs upon the Hayward machine, one of which was sawed by a gig saw into an octagonal pyramidal form corresponding, as nearly as it could be sawed, in all its faces to the leg to be made, and the other turned in a lathe having the same general outline as one of the faces of the leg to be made, what would be the relative difficulty of the operation of planing these two pieces upon the Hayward machine, supposing beds in the carriage to be so made as to receive each block? and state your reasons.

Ans. It would be the most difficult to plane the round block, for the reason that not only more wood would have to be removed, but also because some system of measuring would have to be adopted to determine the angular position of the faces, or their relation to each

other, while in the sawed block this relation of the faces would be rudely determined without measurement, from the faces produced by the saw. In either case, the production of a symmetrical leg would be a matter of difficulty, depending upon the skill and care of
442 the operator, the chances for symmetry, however, being in favor of the gig-sawed leg.

Int. 16. Please read the description of the machine contained in the third, fourth, and fifth direct, and the first, second, and third cross-interrogatories and answer contained in the deposition of Cephas Church, and state how that substantially agrees with or differs from the machine represented in exhibits "Hale & Goodman, Exhibit 1," "Stimpson, H. L. H.," and "Stimpson No. 2."

Ans. The machine referred to by Church differs from the other machines referred to in that a circular saw was employed instead of a rotating planing cutter-head, and in the lack of a pattern and tracing guides by which the relation of the axis of the cutter to the axis of the work is controlled.

Int. 17. Please read your answers to the sixth, seventh, eighth, ninth, tenth, and eleventh direct interrogatories given in your previous deposition in this case, and state what change, if any, has been produced in your judgment there expressed, by the examination of the various models and machines referred to in this deposition.

Ans. No change in my judgment has been produced.

Cross-examination:

Cross-int. 1. Do you consider that the use of the index in the "Hayward" machine or in the "Springfield" machine would be attended with any advantages over the use of the means which are now shown in the models, in doing the work which those machines were required to do, viz., the production of chair backs with the one, and the formation in part of gun-stocks in the other?

Ans. I do not consider that either machine would be improved.

J. R. CROSBY.

443 COMPLAINANTS' PROOF AS TO REPUTATION OF LYMAN WHEELER

Deposition of Levi Kilburn.

JANUARY 31ST, 1865.

Int. 1. Please state your name, age, and residence.

Ans. Levi Kilburn; age, forty-nine; residence, Orange.

Int. 2. What is your occupation, and how long have you followed it?

Ans. The manufacture of chairs, and the lumber business. I've followed it more or less for twenty years.

Int. 3. How many men have you in your employ?

Ans. I think over forty now.

Int. 4. How long have you lived in Orange?

Ans. I think fifteen years last April or next April.

Int. 5. Do you know Mr. Lyman Wheeler? and if so, how long ave you known him?

Ans. Ever since he has been in town. I should think six or eight years.

Int. 6. State, if you know, what his general reputation is for truth and veracity.

(Objected to.)

Ans. I don't know as I could answer that question. I will say this. I've heard people say he wasn't honest.

Int. 7. Do you know Mr. Daniel Stone, and Mr. Elijah F. Porter, and Mr. Henry Gleason? If so, what is their standing in the community?

(Objected to.)

Ans. I don't know them much. I've done a little business with Mr. Stone in his official capacity. Mr. Stone's and Mr. Porter's is very good. Mr. Gleason I only know by sight, and am not acquainted with him.

LEVI KILBURN.

444 *Deposition of J. F. Peckham.*

JANUARY 31, 1865.

Int. 1. State your name, age, and residence?

Ans. J. F. Peckham; age, 33; residence, Dana, Mass.

Int. 2. What is your occupation, and how long have you followed it?

Ans. A mechanic; for about twelve years.

Int. 3. How long have you lived in Dana?

Ans. Ten years, I think.

Int. 4. Do you know Mr. Lyman Wheeler? and if so, how long have you known him?

Ans. I've known him about ten years, I should think.

Int. 5. Where has he lived during that time?

Ans. In Dana or Orange, I think.

Int. 6. State, if you know, what his general reputation is for truth and veracity.

(Objected to.)

Ans. I should call it bad.

Cross-examination:

Cross-int. 1. What persons have you ever heard speak of Mr. Wheeler's reputation for truth and veracity?

Ans. It would be impossible for me to state them all. A. J. Nye, C. N. Doane, I believe, for another; a man in this town named King. These are all the names that I recollect in particular.

Cross-int. 2. What is said King's business?

Ans. I couldn't tell you what it is.

Cross-int. 3. State when you heard said King say anything in regard to the reputation of Mr. Wheeler for truth, what brought up the conversation, and what King said.

Ans. It was at the time King was trying to settle the Albert Reynolds estate. He was telling me about collecting his bills. He said

he had no trouble with any man excepting Mr. Wheeler. That's all I recollect, but I don't recollect all the conversation.

Cross-int. 4. Is that the only time you've heard said King speak in regard to Mr. Wheeler's reputation for truth?

Ans. I think it is the only time I ever saw the man.

Cross-int. 5. Where does the C. N. Doane that you have mentioned reside?

445 Ans. In North Dana.

Cross-int. 6. Have you heard him speak of Mr. Wheeler's reputation for truth and veracity more than once? If yes, how many times?

Ans. I couldn't tell you. I've heard him once in particular. There is but one time that I can remember.

Cross-int. 7. State what at that time brought up the conversation in regard to Mr. Wheeler's reputation for truth and veracity, when it was, and in full what C. N. Doane said.

Ans. Nye was talking about his being in company with Lyman Wheeler—I think, after Wheeler and Sibley got through; it is impossible for me to state the time exactly;—it was after that time. Doane said he thought that he was lucky in getting out of the company. We had a little talk after that, but I can't recollect it. That's all I recollect.

Cross-int. 8. State where the A. J. Nye you have mentioned resides.

Ans. At North Dana.

Cross-int. 9. State how many times you have had conversation with said Nye in regard to Mr. Wheeler's reputation for truth and veracity.

Ans. There's only one time that I recollect.

Cross-int. 10. State when that one time was, what brought up the conversation, and what said Nye said respecting Mr. Wheeler's reputation for truth and veracity, and in full what said Nye said.

Ans. That was to-day. We got talking about this lawsuit, I believe, and finally I asked him what he thought of Mr. Wheeler. He said that Mr. Wheeler was a man that would agree to do one thing with you to-day, and to-morrow know nothing about such agreement. "That I know," said he, "for he done it with me." That's all I remember.

Direct resumed:

Int. 1. Please read your third cross-interrogatory and answer, and state fully the substance of the conversation there spoken of, of what you said, and of what was said in reply.

(Objected to.)

Ans. I can't do that. It was the day the funeral was, and there was a good deal of bluster.

Int. 2. Can you give the substance of your conversation with Doane? If so, do so, as fully as possible.

(Objected to.)

Ans. I don't recollect in particular. We didn't have but a few words to say, and that was one noon between whistle hours.

446 Int. 3. In your answer to your first cross-interrogatory, you say it would be impossible for you to state the names of all the persons whom you have heard speak of Mr. Wheeler's reputation for truth and veracity. State why it is impossible.

(Objected to.)

Ans. Because it was something that I didn't think would ever be thought of afterwards. It was the common talk right along.

J. F. PECKHAM.

Deposition of Adin H. Smith.

JANUARY 31, 1865.

Int. 1. Please state your name, age, and residence.

Ans. Adin H. Smith; age, 49; residence, Athol, Mass.

Int. 2. What is your occupation, and how long have you followed it?

Ans. I am a farmer and brickmaker, and have been for twenty years.

Int. 3. Do you know Mr. Lyman Wheeler? and if so, how long have you known him?

Ans. I do; I've known him six or eight years, I should say.

Int. 4. State, if you know, what is general reputation is for truth and veracity.

(Objected to.)

Ans. Well, I should say, bad.

Int. 5, How far do you live from Orange? and how long have you lived there?

Ans. Nearly four miles, between three and four; I have always lived there.

Cross-examination:

Cross-int. 1. State how many persons you have heard speak of Mr. Wheeler's reputation for truth and veracity.

Ans. Well, I don't know as I could answer that question. I can't call to mind but two that I could name. I should only want to state those that I can recollect now.

Cross-int. 2. State the names of all the persons you have heard so speak.

Ans. Lucius Sibley was one, Amasa Dexter another. I don't recollect any others so positive that I should like to name them now.

Cross-int. 3. What have you heard Mr. Amasa Dexter say regarding Mr. Wheeler's reputation for truth and veracity?

447 Ans. Well, I've heard him say that he would state things that were different from what they were if he could make anything out of it.

Cross-int. 4. Is that all that you've heard Mr. Dexter say upon that subject?

Ans. No, sir, it is not; at the time we were talking about it he told me of his giving a deed of a piece of land and then took back a

mortgage, and then mortgaged the same, I think, to his wife's father, and then got it into the register's office before the deed was got in; I think that was about all of it.

Cross-int. 5. Where did you hear Amasa Dexter make either of the statements you have mentioned?

Ans. It was while Mr. Wheeler and Mr. Sibley was in company here; I couldn't tell you the year now.

Cross-int. 6. What brought up the subject of Mr. Wheeler's reputation for truth between you and Mr. Dexter?

Ans. At that time I had some talk with Mr. Dexter and Mr. Sibley about buying in in company with them, and I met Mr. Dexter, and in conversation I told him what I thought of doing; that was the reason of this coming up.

Cross-int. 7. Did Mr. Dexter make the statement to you above given in respect to the deed and mortgages above referred to of his own knowledge?

Ans. I couldn't say, sir, as to that.

Cross-int. 8. State if Dexter gave the names of the parties to those deeds and mortgages. If yes, will you please state them?

Ans. I don't recollect, it was so long ago; no further than he said, I think, that he gave the mortgage to his wife's father.

Cross-int. 9. Where does said Amasa Dexter reside?

Ans. In Orange.

Cross-int. 10. What have you heard Lucius Sibley say in regard to Mr. Wheeler's reputation for truth?

Ans. Well, I can hardly tell, I've heard him say so much of him; it was some five or six years ago, and I don't know as I can give the exact words; I've heard him say he was never so deceived in a man as he was in Mr. Wheeler; I don't know as I want to make any statements of things that he said; he worked for me awhile after he left Mr. Wheeler, and we had a good deal of conversation; this was after they had stopped working together.

Cross-int. 11. Have you stated all that you have heard Mr. Sibley say in regard to Mr. Wheeler's reputation for truth and veracity which you can recollect? If not, please do so.

Ans. I don't recollect, as I said before, so that I would want to make statements of things which he said at that time.

448 Cross-int. 12. Do you know of said Sibley and Mr. Wheeler having difficulty in their business affairs?

Ans. I know they had trouble at that time, some.

Direct resumed:

Int. 1. Do you mean to be understood, in answer to your first and second cross-interrogatories, that the persons you have named are the only ones you have ever heard speak of Mr. Wheeler's reputation for truth and veracity? If not, please state fully what you do mean.

(Objected to.)

Ans. No, sir; I've heard others, but I don't recollect their names;

in common conversation I've heard it doubted about his being a man of truth and veracity.

(Ans. objected to.)

ADIN H. SMITH.

Deposition of Daniel Stone.

JANUARY 30, 1865.

Int. 1. Please state you name, age, and residence.

Ans. My name is Daniel Stone; age, 58; residence, Dana, Massachusetts.

Int. 2. What is your occupation, and how long have you pursued that profession?

Ans. I am a jack at all trades; do a little at farming; now and then make a justice's writ; the majority of my business now is in the insurance business, as agent.

Int. 3. How long have you resided in Dana?

Ans. Fifty-eight years.

Int. 4. Do you know Mr. Lyman Wheeler, and how long have you known him?

Ans. I do; I should think I had known him for twenty years—fifteen at least.

Int. 5. Where has Mr. Wheeler lived during that time?

Ans. In Dana and Orange; I think I knew him in Greenwich, but was not much acquainted with him till he came to Dana.

449 Int. 6. State, if you know, what his general reputation is for truth and veracity; state fully.

(Objected to.)

Ans. I should judge it was bad from what I've heard of late years.

Cross-examination:

Cross-int. 1. In what towns have you heard the reputation of Mr. Wheeler questioned?

Ans. In Dana and Orange; in Irving and Petersham; I don't know that I can recall conversations with people in other towns respecting him.

Cross-int. 2. How many persons have you heard speak of Mr. Wheeler's reputation for veracity in Petersham?

Ans. I can't tell.

Cross-int. 3. State as nearly as you can.

Ans. Well, I've heard two; I can't tell how many more; I don't lay up such things, and don't want to.

Cross-int. 4. Have you heard more than two in Petersham?

Ans. I should think I had.

Cross-int. 5. State the names of all persons whom you have heard so speak in Petersham.

Ans. Mr. Lucius Sibley, Mr. Bradford Hodges; I may have heard others; I don't recollect their names.

Cross-int. 6. What have you heard Mr. Lucius Sibley say in regard to the reputation for truth and veracity of Mr. Wheeler?

Ans. I heard him say that Mr. Wheeler was the biggest liar he ever see; I don't recollect anything more, positively.

Cross-int. 7. What was Mr. Sibley talking about when he used the expression stated in your last answer?

Ans. I don't recollect.

Cross-int. 8. Did Mr. Sibley reside in Petersham at the time he made that statement?

Ans. I should think he did; I've had several conversations with Mr. Sibley with regard to Mr. Wheeler, and my impression is that he resided in Petersham at that time.

Cross-int. 9. When was it?

Ans. I can't tell exactly; within two or three years.

Cross-int. 10. Have you stated all the expressions of Mr. Sibley questioning the veracity of Mr. Wheeler which you recollect? If not, please state them in full.

Ans. I don't recollect the conversation about Mr. Wheeler
450 any further than I've stated; I've heard various conversations, but I don't recollect them particularly.

Cross-int. 11. In the conversation that you have repeated with Mr. Sibley, was he talking of business difficulties between himself and Mr. Wheeler?

Ans. I think not when he made that statement.

Cross-int. 12. Do you know that Mr. Wheeler and Mr. Sibley have had business difficulties?

Ans. I have heard so.

Cross-int. 13. What statements regarding Mr. Wheeler s reputation for veracity have you heard Bradford Hodges make?

Ans. I don't remember the words.

Cross-int. 14. State when you heard said Hodges make such statements.

Ans. I can't state any particular time; within three or four years.

Cross-int. 15. How often have you heard Bradford Hodges question the reputation of Mr. Wheeler for veracity?

Ans. That I can't say; I've heard him use language that, in my judgment, questioned his reputation for truth and veracity very much; I can't say that I've heard him more than once, or when; I don't want to say anything more than I'm certain of.

Cross-int. 16. Where did Bradford Hodges reside at the time he made the statements you refer to, and where does he now reside?

Ans. In Petersham.

Cross-int. 17. Have you ever heard Mr. Lucius Sibley express any feeling against Mr. Wheeler?

Ans. I don't know what you mean exactly; I've heard him say that he thought he had injured him.

Cross-int. 18. Did Mr. Sibley express himself warmly on that subject.

Ans. Well, I don't know what you mean by that; he didn't appear to be excited.

Cross-int. 19. Have you ever heard Mr. Sibley express any bitterness against Mr. Wheeler?

(Objected to.)

Ans. I think my answer in which I state that he called him the biggest liar he ever knew answers that question better than any I can give; that was as bitter as anything I ever heard him say; if that wasn't bitter, I don't know as I've heard him say anything that was bitter.

Cross-int. 20. What is the occupation of Bradford Hodges?

Ans. Farmer.

Cross-int. 21. Is there more than one person of that name now resident in Petersham?

451 Ans. Not that I know of.

Cross-int. 22. Are you familiarly acquainted in Petersham?

Ans. Considerably; I'm pretty well acquainted in the west part of Petersham, and indeed know a good many people all over the town of Petersham.

Cross-int. 23. How many persons have you heard question Mr. Wheeler's reputation for veracity in Irving?

Ans. I don't know.

Cross-int. 24. State as nearly as you can.

Ans. I have.

Cross int. 25. State the names of such persons in Irving.

Ans. I recollect J. E. Stone has used language that I should call of that character; I've heard others in Irving; I don't recollect their names exactly; I'm not much acquainted there.

Cross-int. 26. Can you state the name of any other person in Irving whom you have heard question Mr. Wheeler's veracity?

Ans. I've heard others, but I can't give their names positively.

Cross-int. 27. Will you swear that you've heard any other persons than Mr. Stone in Irving question Mr. Wheeler's veracity.

Ans. I've stated so, and I suppose I am under oath.

Cross-int. 28. Who?

(Objected to as being clearly, answered in the twenty-fifth cross-answer.)

Ans. I answered that once before, that I couldn't give the names of the persons.

Cross-int. 29. How many times have you heard J. E. Stone question the reputation of Mr. Wheeler for veracity?

Ans. I can't tell.

Cross-int. 30. State as nearly as you can.

Ans. Oh, I can't tell anything about it; I've had several conversations with him about it; there may be a dozen, or there may be only a quarter of that; I don't know.

Cross-int. 31. State fully and particularly all said Stone has said to you regarding Mr. Wheeler's character or reputation for veracity.

Ans. I can't do it.

Cross-int. 32. State any exact words which Mr. Stone has used to you regarding Mr. Wheeler's character or reputation for veracity.

Ans. I can't do it.

Cross-int. 33. State as nearly as you can.

Ans. I can't do it; I don't keep a journal of all the conversations

I've heard; I'm travelling round the country all the time on insurance business, and hear a great deal.

452 Cross-int. 34. Within what time have you heard said Stone question the veracity of Mr. Wheeler?

Ans. Within two years.

Cross-int. 35. Ever before that time? If yes, when?

Ans. Well, before that; within five years.

Cross-int. 36. Do you know of said Stone and Mr. Wheeler having had any business trouble or difficulty?

Ans. No, sir.

Cross-int. 37. Have you ever heard said Stone speak harshly against Mr. Wheeler?

Ans. No, sir.

Cross-int. 38. Have you ever heard said Stone speak against Mr. Wheeler in any way other than what you have already stated?

Ans. I can't see the difference whether a man speaks of one's character in business transactions, or whether he questions his character for truth and veracity.

Cross-int. 39. How many persons in Orange have you heard speak against the reputation of Mr. Wheeler for veracity?

Ans. I can't tell.

Cross-int. 40. Who in Orange have you heard so speak?

Ans. Well, as I've before stated, I've heard persons when I was about on my insurance business speak against Mr. Wheeler, that I didn't know their names, or I don't recollect them if I did know them.

Cross-int. 41. State all the names you can of persons in Orange whom you have heard so speak.

Ans. There's a Mr. Robins I've heard speak against him; I think his name is Robins; I'm not positive of any other particular names.

Cross-int. 42. State Mr. Robins's full name and occupation.

Ans. I think his name is Lewis; he's a machinist by occupation, I believe.

Cross-int. 43. State what Mr. Robins said in regard to Mr. Wheeler's veracity.

Ans. I can't do it.

Cross-int. 44. State in what connexion it was.

Ans. In connexion with the burning of those buildings mostly; I think I've heard him speak in other connexions.

Cross-int. 45. Were you the agent of the insurance company in which Mr. Wheeler's buildings that were burnt were insured?

Ans. I think I was agent of some of the companies; he was insured in several companies, I understood.

453 Cross-int. 46. Did Mr. Wheeler receive his money from the insurance company for his buildings burnt?

Ans. I don't know. I heard the secretary of one insurance company say that he paid him. That's all I know about it.

Cross-int. 47. Do you know whether said Robins had property in the same building which was burnt?

Ans. I think I've heard Mr. Robins say he had, or in the block which was burnt at the time.

Cross-int. 48. Do you know of there ever having been any matter of difference between J. E. Stone, mentioned above by you, and Mr. Wheeler?

Ans. I don't know as I do. I don't know what. I don't know as there was any.

Direct resumed:

Int. 1. Please state what was Mr. Sibley's occupation, how long you have known him, and what is his standing in his town.

(Objected to.)

Ans. He is a farmer at present in Petersham. I've known him for forty years and more. His standing is good, so far as I know.

Int. 2. Please answer the same questions with regard to Mr. Hodges, Mr. Stone, and Mr. Robins.

Ans. Mr. Hodges is a farmer. I've known him thirty years, probably; yes, more than forty years. I don't know but his standing is tolerably good. I don't know anything why it isn't good. I've known Mr. Stone, I guess, forty years. He is a manufacturer now. He is one of the selectmen of Erving, I believe. I've known Mr. Robins five or six years. He is a mechanic—a machinist, I guess. I never heard any one say anything against his standing. I'm not much acquainted with him.

DANIEL STO E.

Recalled by consent:

Cross-int. 1. Have you ever solicited insurance from Mr. Wheeler?

(Objected to, but not on account of its being put after the examination was done.)

Ans. Yes, I've asked Mr. Wheeler whether he would like to have me do some insurance for him. I presume two or three times within five years.

DANIEL STONE.

454 *Deposition of Henry Gleason.*

JANUARY 30TH, 1865.

Int. 1. Please state your name, and residence, and age?

Ans. My name is Henry Gleason; age, forty-three; residence, Dana.

Int. 2. What is your occupation, and how long have you followed it?

Ans. I am a farmer, and have been as long as I have done any business. I've always lived on a farm and worked on it.

Int. 3. Have you any other occupation?

Ans. I've a saw-mill on the farm that I work in some.

Int. 4. How long have you resided in Dana?

Ans. About forty-one or forty-two years.

Int. 5. Do you know Mr. Lyman Wheeler, and how long have you known him?

Ans. I've known him since he came to Dana. I don't know exactly when it was, but think twelve or fifteen years ago.

Int. 6. Where has Mr. Wheeler lived during that time?

Ans. At Dana and Orange, I think.

Int. 7. State, if you know, what his general reputation is for truth and veracity.

(Objected to.)

Ans. By report I should think not very good. I know nothing further than by report.

Cross-examination:

Cross-int. 1. What persons have you ever heard speak of Mr. Wheeler's character for truth?

Ans. That's a hard question to be called on to answer. I've been told and overheard conversations respecting him with regard to his reputation on truth and veracity.

Cross-int. 2. State both who has told you anything and whom you have heard converse in regard to Mr. Wheeler's character for truth and veracity?

Ans. Well, I've overheard many persons speak of it. I've stated that I couldn't recollect many of them, because I never expected to be called upon to answer such questions. I've heard Mr. Doubleday say that he thought he represented things sometimes a little better than they would bear. I've heard Mr. J. E. Stone, a brother-in-law of mine, in conversation about Mr. Wheeler, say that you couldn't tell much by what he said. I couldn't give the exact lan-
455 guage of course. I think I've heard Mr. Sibley speak of his o: him, troubles with Mr. Wheeler, and say that he had injured him, lied to something in that way. I don't recollect the names of any others that I can call distinctly.

Cross-int. 3. State the full name and residence of Mr. Doubleday.

Ans. Lucius Doubleday, of Dana.

Cross-int. 4. Is said Doubleday any relation of yours by marriage or otherwise?

Ans. He is a brother-in-law of mine.

Cross-int. 5. You have been present and just heard Mr. Daniel Stone give his deposition, have you not?

Ans. Yes, sir.

Cross-int. 6. Is the J. E. Stone he mentioned and also Lucius Sibley the same persons he mentioned?

Ans. I think they are.

Cross-int. 7. Do you know whether there has ever been any matter of difference between said Stone and Mr. Wheeler?

Ans. I do not.

Cross-int. 8. Have ever heard said Stone make any severe remarks against Mr. Wheeler?

Ans. I never did.

Cross-int. 9. Has there ever been any prejudice in you rmind as to Mr. Wheeler?

Ans. Not any.

Direct resumed:

Int. 1. Please state whether, by your answer to the eighth cross-

interrogatory, you mean to be understood that you never heard Mr. Stone make any severe remarks as to Mr. Wheeler's character for truth and veracity. If not, state what you do mean.

Ans. I don't know that I've ever heard him make any severe remarks. I've heard him say that you couldn't tell by what Mr. Wheeler said what he meant.

HENRY GLEASON.

456 *Deposition of Elijah F. Porter.*

JANUARY 30, 1865.

Int. 1. Please state your name, age, and residence?

Ans. Elijah F. Porter; age, 49; residence, New Salem.

Int. 2. What is your occupation, and how long have you followed it?

Ans. I am a farmer, and have worked at it mostly ever since I did anything; at stone work, some; at lumbering, some.

Int. 3. How long have you resided at New Salem?

Ans. Thirty years.

Int. 4. Do you hold any office in that town? and if so, what?

Ans. One of the selectmen.

Int. 5. Do you know Mr. Lyman Wheeler, and how long have you known him?

Ans. I should think I'd known him about eight years—ever since he came to Orange.

Int. 6. How far is Orange from New Salem?

Ans. Seven miles, I believe.

Int. 7. State, if you know, what his general reputation is for truth and veracity.

(Objected to.)

Int. 8. Report says it is bad. That's all I know.

Cross-examination:

Cross-int. 1. State what persons you have heard speak of Mr. Wheeler's reputation for truth and veracity.

Ans. I've heard Lucius Sibley, Frederick Pierce; I don't think of any others now, it's so long ago; I've heard others, I don't recollect who.

Cross-int. 2. State what you have heard Frederick Pierce say.

Ans. I've heard him say that he didn't think any dependence could be put upon his word.

Cross-int. 3. State when you heard Mr. Pierce so say.

Ans. I can't tell the precise time—some five or six years ago.

Cross-int. 4. Was it about the time Mr. Wheeler and Sibley, under their firm-name of Wheeler & Sibley, went into insolvency?

Ans. It wasn't a great ways from that time—whether before or after, I couldn't say.

Cross-int. 5. Did Lyman Wheeler and said Lucius Sibley compose that firm of Wheeler & Sibley?

457 Ans. I suppose they did.

Cross-int. 6. Did that firm of Wheeler & Sibley owe you when it went into insolvency?

Ans. They did.

Cross-int. 7. Was said Frederick Pierce interested with you in your said debt against Wheeler & Sibley?

Ans. He was.

Cross-int. 8. Was not the conversation of said Pierce in regard to Mr. Wheeler, solely in regard to money matters?

Ans. I should think it was not.

Cross-int. 9. Did you ever hear said Pierce speak of Wheeler's reputation for truth and varacity more than once?

Ans. I should think I had, quite a number of times.

Cross-int. 10. State what he said at those several times.

Ans. He said he didn't think that his word was to be depended upon, or something of that purport; I don't know that that was the exact language; that is all I recollect.

ELIJAH F. PORTER.

Deposition of H. A. Meacham.

JANUARY 30TH, 1865.

Int. 1. State your name, age, and residence.

Ans. My name is H. A. Meacham; age, 48; residence, Orange.

Int. 2. What is your profession, and how long have you followed it?

Ans. A physician; twelve years.

Int. 3. How long have you lived in Orange?

Ans. Eleven years.

Int. 4. Do you know Mr. Lyman Wheeler? and if so, how long have you known him?

Ans. I have known him some ten years, I think.

Int. 5. Where has he lived during that time?

Ans. He has been in this town. I couldn't state the exact number of years. I should think four or five. Previous to that he lived at North Dana.

Int. 6. State, if you know, what his general reputation is for truth and varacity.

(Objected to.)

458 Ans. I've ofter heard the remark when the question was asked, "Well, who did that come from?" and the answer was, "Mr. Wheeler." The reply would be, "It might be true, and it might not be true."

Cross-examined:

Cross-int. 1. Who have you heard make the last reply mentioned in your last answer?

Ans. I don't know as I could designate any one in particular.

Cross-int. 2. Did you ever hear any one say that Mr. Wheeler could not be believed under oath?

Ans. No; I don't know as I ever did. I never heard any person put in the words "under oath;" they did not specify particularly.

Cross-int. 3. By how many different persons did you ever hear said remark, "That might be true or might not," made?

Ans. I've only two persons that I could designate, particularly, that made the remark to me direct.

Cross-int. 4. Who were those two persons?

Ans. Mr. Lucius Sibley and Mr. Robins. I think his name is Lewis Robins.

Cross-int. 5. When did said Robins and Sibley make such remark?

Ans. I don't know as I could tell the time. Mr. Sibley said it at about the time of the burning of the shop, and Mr. Robins afterwards.

Cross-int. 6. How soon afterwards?

Ans. Not long. I couldn't say whether a week or a month. It was soon after the burning of the shop.

Cross-int. 7. What was each of them talking about when they made said remark?

Ans. Mr. Robins was talking about the shop being burnt. I was passing him and stopped and heard the remark. I had no conversation with him myself. And I heard Mr. Sibley under the same condition of things. I had no conversation with either of them myself at that time.

Cross-int. 8. State about how long ago this was.

Ans. I don't know as I can. I should say within three years.

Direct resumed:

Int. 1. Can you tell us what the remark was, or the remarks were, made by Mr. Sibley and Mr. Robins? If not, please give the substance.

(Objected to.)

459 Ans. What I mean to be understood was, that in passing them I heard the remark made that they couldn't believe what Mr. Wheeler said. I stopped but a moment as I was passing them.

Int. 2. Can you recollect the words, or the substance of any simlar remark made by any one else? If so, please state it.

(Objected to.)

Ans. I couldn't designate any name that I can think of, no more than I have previously stated,

Int. 3. Can you you give us any idea—a general one, if you cannot state definitely—as to how frequently you heard remarks similar to them?

(Objected to.)

Ans. It is not often, as I've not been so situated as to hear such a remark often.

(Ans. objected to.)

Cross-resumed:

Cross-int. 1. Do I understand you to say that you do not remember the name of any person who has made the reply "It might be,

true and it might not be true," stated in your answer to the sixth interrogatory?

(Objected to as assuming that the witness testified that that was in fact the language used.)

Ans. I couldn't designate any excepting the two that I have named.

Cross-int. 2. Are you a practising physician in Orange at the present time?

Ans. Yes, sir.

Cross-int. 3. Does your business bring you frequently into communication with the business men and inhabitants generally of Orange?

Ans. Yes, sir.

Direct resumed:

Int. 4. Please read your answer to the sixth direct interrogatory, and state whether or not you mean to be understood as testifying that the reply there mentioned is in the very words used by the persons replying.

Ans. As near as I could recollect the reply that they made.

H. A. MEACHAM.

460 *Deposition of S. P. Tolman.*

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is S. P. Tolman; am forty-two years of age, and reside in Charlestown, Mass. I am a dealer in provisions and groceries.

Int. 2. Did you ever live in Orange, in Massachusetts? and if so, from what time to what time?

Ans. I have; I should think I went to Orange in 1854 or 1855, and left in '61.

Int. 3. While there were you acquainted with Mr. Lyman Wheeler, of that place?

Ans. I was.

Int. 4. State, if you know, what was his general reputation for truth and veracity during that time.

(Objected to.)

Ans. Well, I hardly know what to say. I should, as far as I have heard said, I should say his reputation was not very good.

S. P. TOLMAN.

Deposition of John E. Hill.

Int. 1. What is your name, age, residence, and occupation?

Ans. Mr. name is John E. Hill; am forty-eight years of age, and reside at Athol. I am a manufacturer and farmer. I manufacture cloth. I have one or two small mills of my own, and am interested in a stock company for cloth manufacture, the Millers' River Company, of which I am the president and one of the directors. I am also a director in the Millers' River Bank.

Int. 2. How long have you lived in Athol?

Ans. About thirty-five years.

Int. 3. Do you know Lyman Wheeler, of Orange, Mass.? and if so, how long have you known him?

Ans. I do know him, and have known him six or eight years.

Int. 4. State, if you know, what is his general reputation for truth and veracity.

Ans. I have frequently heard it called in question. From what I have heard, I consider it not good.

461 Int. 5. Do you mean that you have heard others say that his general reputation for truth and veracity was not good, or do you mean that his general reputation for truth and veracity is not good?

(Objected to.)

Ans. I mean that I have heard others say it was not good.

Int. 6. Do you not know yourself what sort of reputation Mr. Wheeler has among his neighbors and acquaintances as to truth and veracity?

(Objected to.)

Ans. It is difficult for me to answer as fully as if I had lived nearer and known more of his neighbors and acquaintances. I have known some that called it bad.

Int. 7. Have you from time to time, during your acquaintance with Mr. Wheeler, heard his character for truthfulness and veracity spoken of by his neighbors and acquaintances?

(Objected to.)

Ans. I have.

Int. 8. Now my question is, what sort of character, in this respect, they have generally given him?

Ans. Bad.

Cross-examination:

Cross-int. 1. Whom have you heard speak of Mr. Wheeler's character?

(Objected to.)

Ans. The first man I recollect of is A. H. Smith; a Mr. Robbins, I do not recollect his given name; Mr. Smith lives at the easterly part of Athol, near Orange; Mr. Sibley, of Petersham; I have heard others; I have heard Deacon Hunt and Mr. George T. Johnson speak of it; I have heard people from Dana, I do not know that I can call their names.

Cross-int. 2. When did you hear the persons you have named speak of Mr. Wheeler's character?

(Objected to.)

Ans. Some of them I heard speak of it six or eight years ago, and some three or four years ago.

Cross-int. 3. Name those you heard speak of it six or eight years ago, and those you heard speak of it three or four years ago.

(Objected to.)

Ans. Mr. Smith, Mr. Sibley, Mr. Johnson, and I will add a Mr. Stimpson, an old gentleman of Dana. These were the per-
462 sons I heard at that time; I mean I fix the time by a transaction which led me to make an inquiry. I recollect hearing the others I have named speak of it three or four years ago.

Int. 4. What is Mr. Hunt's full name, and where does he reside?

Ans. Rodney, and resides at Orange.

Cross-int. 5. What was the circumstance to which you refer as fixing the date of the first conversation?

Ans. It was a settlement between Mr. Wheeler and a Mr. Sibley, the Mr. Sibley I have referred to.

Cross-int. 6. Did Mr. Wheeler and Mr. Sibley have trouble about that settlement, and legal proceedings?

Ans. They had trouble about the settlement. There may have been legal proceedings; I do not recollect how that was.

Cross-int. 7. Mr. Sibley had been, or was then, a partner with Mr. Wheeler?

Ans. Yes, sir.

Cross-int. 8. What connexion did you have with that settlement, or with Mr. Sibley or Mr. Wheeler, which led you to make inquiries?

Ans. I bought one-half of the real estate and machinery of Mr. Sibley.

Cross-int. 9. Did you know Mr. Sibley and Mr. Wheeler as partners went into insolvency at that time?

Ans. I heard of their going in after I bought the real estate.

Cross-int. 10. Was your interest in the real estate affected by the settlement or by the proceedings in insolvency?

Ans. I do not know how I can answer that question satisfactorily to myself. I do not understand that my interest was affected any way; I supposed my title was good to the real estate, and did till I parted with it.

Cross-int. 11. The real estate was a part of the partnership property, was it not?

Ans. I did not so understand it.

Cross-int. 12. Did any question come up as to its being held for the debts of Mr. Wheeler and Mr. Sibley?

Ans. There was a big mortgage on the property that had got to be paid.

Cross-int. 13. Who was the Mr. Smith of whom you have spoken, and what connexion or relation did he have with Mr. Wheeler or Mr. Sibley, or the settlement between them?

Ans. He is a brick manufacturer. I do not know that he had any connexion with either of them or with the settlement.

Cross-int. 14. Who was Mr. Robbins, and where does he now reside, and what connexion, if any, did he have with the parties or the settlement?

Ans. He was a machinist, and did reside at Orange, and
463 does now, so far as I know. He had no connexion that I know of with the settlement; he did occupy a portion of the real estate that Mr. Wheeler owned, I think.

Cross-int. 15. What was the occasion upon which you heard Mr. Hunt speak of Mr. Wheeler?

Ans. It was about the time of Mr. Wheeler's fire—the burning of his shop.

Cross-int. 16. What was the occasion of Mr. Johnson speaking of him?

Ans. I think I asked Mr. Johnson's opinion of Mr. Wheeler as a man.

Cross-int. 17. What led you to ask him?

Ans. I had bought this real estate of Mr. Sibley, and I wanted to know as much as I could about Mr. Wheeler. I had made an arrangement with Mr. Wheeler to divide, I to take the real estate and he the machinery. Mr. Wheeler backed out of the agreement, and this was the reason of inquiry about him. This is the only one I now recollect.

Cross-int. 18. What did Mr. Johnson say? Give his language as near as you can.

Ans. I think he said I could not rely at all on anything he might tell me.

Cross-int. 19. What did Mr. Hunt say at the time you refer to?

Ans. I think I inquired of Mr. Hunt with regard to Mr. Wheeler's ability to pay, and in the answer I got I drew out his opinion of the man.

Cross-int. 20. State what he said; give his language as near as you can.

Ans. Well, I think, he said, for one thing, that he believed Mr. Wheeler fired his shop or was knowing to it. Such a man as that I must judge of his honor and ability to pay as well as he. I cannot give the words exactly.

Cross-int. 21. What else did he say?

Ans. I think he said of Mr. Wheeler that he never considered his word good for anything.

Cross-int. 22. What did Mr. Smith and Mr. Robbins say at the time you talked with them? Give their language as near as you can.

Ans. Mr. Robbins said that he could not rely at all on Mr. Wheeler's word. What I heard Mr. Smith say was at an earlier date. I do not so well recollect the words.

JOHN E. HILL.

464 *Deposition of Rodney Hunt.*

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Rodney Hunt; am fifty-four years of age; and reside at Orange, and am a millwright and machinist. I carry on the building of machinery under three concerns in Orange. My building of woollen machinery is under the firm of Hunt and Wait; the millwright business is under Hunt & Flint.

Int. 2. Do you hold the position of deacon in your town? If so, in what society, and how long have you held it?

Ans. I was so, for two years, in the Baptist society, and resigned last year.

Int. 3. How long have you resided in Orange?

Ans. Some twenty-four years.

Int. 4. Do you know Mr. Lyman Wheeler, of Orange? and if so, how long have you known him?

Ans. I do know him, and have known him six or seven years.

Int. 5. State, if you know, what is his general reputation as to truth and veracity.

Ans. Well, so far as I know, I have no personal knowledge of it; all I know is what others have said.

Int. 6. What have others generally said as to his truth and veracity?

(Objected to.)

Ans. Well, I have heard others speak against his being a man of truth and veracity.

Int. 7. If you can state what character he bears among his neighbors and acquaintances generally in this respect, please do so.

Ans. There are some who would say he is not a man of truth; then I have heard others say he has dealt fairly and straightforward with them.

Cross-examination:

Cross-int. 1. Will you now repeat the explanation which you gave before your answer to the last interrogatory.

Ans. At the time he had his building burnt there was a very hard quarrel between him and Mr. Sibley, and there was a good deal said on all sides. Some took sides one way and some another, and consequently I think there was a good deal said on all sides by persons who did not regard what they were saying; that is, they were over-
465 heated at the time. The most I learned respecting Mr. Wheeler's character was more from Mr. Sibley than any other man.

Cross-int. 2. I understood you, in making the first explanation, to say that you might yourself have said too much during the excitement which you have referred to. Will you repeat what you said in that explanation as to yourself?

Ans. I think what I said respecting the burning of the building was too much, because it was something I did not know, but derived from others' opinion.

Direct interrogatory:

Int. 1. Please to dismiss from your mind now the old dispute as to whether Mr. Wheeler set fire to his shop or not, and speak, if you can, of the general reputation he has borne since that time as to truth and veracity. Can you state what that general reputation has been as to truth and veracity?

(Objected to.)

Ans. I shall have to answer as before. Some will say he is not a man of truth and veracity, and others will say he always dealt fairly with them.

RODNEY HUNT.

Deposition of George T. Johnson.

Int. 1. What's your name, age, residence, and occupation?

Ans. My name is George T. Johnson; I am forty-two years of age, and reside at Athol; I am a manufacturer of cloth.

Int. 2. State how long you have lived in Athol.

Ans. About four years. Previous to that I lived in Dana.

Int. 3. Do you know Lyman Wheeler, of Orange? and if so, how long have you known him?

Ans. I do know him, and have known him for about fifteen years.

Int. 4. State, if you know, what is his general reputation for truth and veracity.

(Objected to.)

Ans. It is not good.

Cross-examination:

Cross-int. 1. You have previously testified in this case, have you not?

Ans. I have.

GEORGE T. JOHNSON.

466 RESPONDENTS' PROOF IN REPLY AS TO REPUTATION OF LYMAN WHEELER.

Deposition of A. J. Clark.

JANUARY 31, 1865.

Int. 1. Please state your name, age, residence, and occupation.

Ans. My name is Andrew J. Clark. Am twenty-nine years of age. I reside in Orange. I am a manufacturer.

Int. 2. State whether or not you have held any offices in or for said town.

Ans. I represented the seventh Franklin county district in the general court last year, 1864.

Int. 3. State whether you know Lyman Wheeler of said Orange, and how long you have known him.

Ans. I do. Have known him, I think, for seven years.

Int. 4. State what, if you know, is the reputation of said Wheeler for truth and veracity.

Ans. Good, so far as I know.

Cross-int. 1. How far do you know Mr. Wheeler's reputation for truth and veracity?

Ans. I know from having had business transactions with him.

Direct resumed:

Cross-int. 1. State whether or not you have ever heard Mr. Wheeler's reputation for truth and veracity questioned.

Ans. I think not.

Cross resumed:

Cross-int. 1. You say you think not. Are you willing to swear that you never heard men in Dana and Orange, and the neigh-

467 boring towns, state, as their opinion, that Mr. Wheeler was unworthy of belief, or that he was a dishonest man? I don't mean to ask you whether they used those words, but whether they used words conveying that idea in substance.

(Objected to.)

Ans. I am.

Cross-int. 2. Do you know that six or eight men of this neighborhood have testified that they have repeatedly heard such reports? and if so, and if they speak the truth, can you tell us any reason why you should not have heard them also?

(Objected to.)

Ans. I am not aware that any such testimony has been given.

Cross-int. 3. Do you know why you were asked the question as to Mr. Wheeler's reputation for truth and veracity?

(Objected to.)

Ans. I suppose to get at the truth—the facts of the case.

Cross-int. 4. Why did you hesitate so long before you gave your last answer?

(Question objected to as containing a misstatement.)

The counsel for the complainant withdraws the question for a moment, and puts the following: Did you not hesitate in fact, or delay answering for more than twice the length of time that you delayed answering any other question previously put to you in this examination?

(Objected to.)

Ans. I may or may not. I have no means of knowing the exact length of time.

Cross-int. 5. Why did you hesitate or belay so long before you gave your answer to the third cross-interrogatory resumed?

(Objected to.)

Ans. To think how to answer the question properly.

Cross-int. 6. Please read your answer to the first cross-interrogatory resumed, and state whether you mean that answer to cover the whole question, or only to be a denial that you ever heard the expressions in the question used by the men spoken of in the question?

Ans. I meant what I said.

Cross-int. 7. Will you be kind enough to explain your meaning a little more fully?

Ans. I think I have answered the question.

Cross-int. 8. Then you refuse to give the explanation requested, do you?

Ans. I do not.

Cross-int. 9. Please give it, then.

468 Ans. I mean that I never have heard men in Dana and Orange question the truth and veracity of Lyman Wheeler.

Cross-int. 10. Did you ever hear men in the neighboring towns do this?

Ans. I never have, not to my recollection.

Cross-int. 11. Did you ever yourself, in Dana or Orange, or the

neighboring towns, make any remark in any way derogatory to Mr. Wheeler's reputation for truth and veracity?

Ans. Not that I ever knew of.

Cross-int. 12. Did you ever use these words, or words which conveyed the same idea in substance, viz: I know Wheeler, and he is a curious fellow, or a very curious fellow, but I don't want to say anything about it? Search your memory carefully, if you please, before you answer.

(Objected to.)

Ans. I have no recollection of saying anything of the kind.

ANDREW J. CLARK.

Deposition of W. S. Ballou.

JANUARY 31, 1865.

Int. 1. Please state your name, age, residence, and occupation.

Ans. My name is Warren S. Ballou; am forty-five years of age; I reside in Orange, and am in the clothing business.

Int. 2. State how long have you resided in Orange?

Ans. I have resided in Orange for eleven years, and am now town treasurer.

Int. 3. State whether you know Mr. Lyman Wheeler of Orange, and how long you have known him.

Ans. I know him, and have, ever since he has been in the place. I couldn't say how many years it is.

Int. 4. State what the reputation of said Wheeler is for truth and veracity.

(Objected to.)

Ans. It is good, as far as I know.

W. S. BALLOU.

469 *Deposition of Bradford Hodges.*

JANUARY 31, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Bradford Hodges; am sixty-three years of age; I reside in Petersham, Mass.; I am a farmer, of late years.

Int. 2. State whether you know Lyman Wheeler, of Orange; and if yes, how long you have known him, and how you happened to know him.

Ans. I have known him for, I should think, fifteen years; I lived within three miles of him at North Dana, and have been in the habit of seeing him frequently, both while he lived there and since he moved to Orange.

Int. 3. State what the reputation of said Lyman Wheeler is for truth and veracity.

Ans. Good.

Int. 4. Do you know Daniel Stone, of North Dana?

Ans. Yes, sir.

Int. 5. Do you know J. E. Stone, of Erving?

Ans. Yes, sir.

Int. 6. Do you know whether said two Stones are connected? and if so, what connexion?

(Objected to.)

Ans. Brothers, I believe.

Int. 7. Do you know Henry Gleason, of North Dana?

Ans. I do.

Int. 8. Do you know whether there is any connexion by marriage or otherwise between said Gleason and said J. E. Stone?

(Objected to.)

Ans. It is common report that J. E. Stone married Henry Gleason's sister.

Int. 9. Do you know Dr. Hiram A. Meacham, of Orange?

Ans. I do.

Int. 10. Do you know whether there is any connexion by marriage or otherwise between Dr. Meacham and said Daniel Stone?

(Objected to.)

Ans. By common report they married sisters.

Cross-examination:

Cross-int. 1. Are you willing to swear that you never heard men in Dana and Orange, and the neighboring towns, state, as
470 their opinion, that Mr. Wheeler was unworthy of belief, or that he was a dishonest man? I don't mean to ask you whether they used those words, but whether they used words conveying that idea in substance.

Ans. I don't know that I ever did.

Cross-int. 2. The question I meant to put, sir, was, not whether you didn't know as you ever did, but whether you are willing to swear that you did not.

Ans. I heard one man say that he was not a man of truth; this was Mr. Sibley, of Petersham.

Cross-int. 3. Do you mean that he is the only man whose name you now recollect, or do you mean to testify that he is the only man you ever heard in any of these towns make any remark derogatory to Mr. Wheeler's reputation for truth and veracity?

(Objected to.)

Ans. Yes, sir. (Question repeated by the magistrate.) He is the only man that I have ever heard say anything against Mr. Wheeler's reputation.

Cross-int. 4. Did you never say anything of the kind yourself?

Ans. No, sir.

Cross-int. 5. Mr. Daniel Stone has testified that you told him that Mr. Wheeler was not a man of truth, or something to that effect. Do you believe that Mr. Stone would testify falsely?

(Question objected to on the ground that Mr. Stone testified that he could remember no words which this witness used.)

Ans. I don't know what his views are of the case; I think he has, if he testified to that.

Cross-int. 6. Do you mean by that anything more than that you do not recollect making any such remark?

Ans. I know that I never had no conversation with Daniel Stone concerning Mr. Wheeler; I have no recollection of it no way.

Cross-int. 7. Do you believe that Mr. Stone would swear to anything he did not believe?

(Objected to.)

Ans. I think he has if he has testified to that. (The question being repeated, the witness said further:) No, I do not think he would.

Direct resumed:

Int. 1. Do you know of there being any matter of difference or feeling between Mr. Lucius Sibley and Mr. Lyman Wheeler?

Ans. I know they have not set their horses together very friendly towards one another for years past.

471 Cross resumed:

Cross-int. 1. Did you ever hear anybody say why not?

Ans. I have heard them both say.

Cross-int. 2. Did you ever hear anybody else say why not?

Ans. I don't recollect that I have.

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BRADFORD × HODGES.
mark.

Deposition of John R. Whipple.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is John R. Whipple; am seventy years of age; I reside in Orange; have been a merchant.

Int. 2. State whether you have held any town or county offices in the town of Orange or the county of Franklin.

Ans. I have been selectman and assessor and town treasurer in the town of Orange; have held the office of justice of the peace for the county of Franklin.

Int. 3. State whether you know Lyman Wheeler, of Orange; and if yes, how long you have known him, and how you happened to know him.

Ans. I have known him some four or five years; he was concerned here in business, and I have had business transactions more or less every year.

Int. 4. State what the reputation of said Lyman Wheeler is for truth and veracity.

Ans. I should think it was good, as far as I know.

Cross-examination:

Cross-int. Have you retired from business?

Ans. I have, since last August.

Cross-int. 2. Have you ever heard any one in Dana or Orange, or the neighboring towns, say that Mr. Wheeler's word could not be depended upon, or something to that effect?

Ans. That is a close question; I heard Mr. Sibley; I spoke to Mr. Sibley respecting the fire here when Mr. Wheeler's shop was burnt up; he said he thought Mr. Wheeler represented the personal property that was burnt in the fire worth more than it actually was; that is about all that I recollect.

472 Cross-int. 3. Is that the only circumstance that you recollect.

Ans. I should think it was; there was a good deal said at the time about the fire, but I don't recollect anything else that would have any bearing on this case.

Cross-int. 4. Do you mean, sir, that there was a good deal said at the time about the fire by Mr. Sibley, or by the people of Wheeler's neighborhood?

(Objected to.)

Ans. There was nothing said by either of them that would affect Mr. Wheeler's character for truth and veracity, except what I have said of Mr. Sibley.

Cross-int. 5. What I want to know, sir, is, whether what was said in fact was said by Mr. Sibley, or by the people of Wheeler's neighborhood.

(Objected to.)

Ans. People said generally, not Mr. Sibley in particular, that I know of.

Cross-int. 6. Have you ever heard any one in Orange or Dana, or any of the neighboring towns, say that Mr. Wheeler wasn't honest, or words to that effect?

Ans. I don't recollect that I ever heard anybody say that he was dishonest.

Cross-int. 7. Do you know of any other occurrence in Mr. Wheeler's life which was talked about a good deal in Mr. Wheeler's neighborhood?

(Objected to.)

Ans. I do not.

J. R. WHIPPLE.

Deposition of Cephas M. Thayer.

Int. 1. What is your name, age, residence, and occupation?

Ans. My name is Cephas M. Thayer; age, twenty-five years; residence, in Orange; I am a merchant.

Int. 2. State whether you know Lyman Wheeler, of Orange; and if yes, how long you have known him, and how you happened to know him.

Ans. I have known him for five years; I came here to work for him in the shop; I worked for him eleven months, and since then I have had dealings with him more or less every month in the year.

Int. 3. State what the reputation of said Lyman Wheeler is fo truth and veracity.

Ans. I don't know of anything against him.

CEPHAS M. THAYER.

473 *Deposition of Thomas E. Bridge.*

JANUARY 31, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. Thomas E. Bridge; am thirty-five years of age; I reside in Orange; I am a merchant.

Int. 2. How long have you resided in Orange?

Ans. About eight years.

Int. 3. State whether you know Lyman Wheeler, of Orange; and if yes, how long you have known him, and how you happened to know him.

Ans. I have known him ever since he came to Orange—some six or seven years, I should think; I have traded with him and sold him goods.

Int. 4. State what the reputation of said Lyman Wheeler is in the community for truth and veracity.

Ans. Good as far as anything that I know.

Cross-examination:

Cross-int. 1. What do you sell?

Ans. Nearly all kind of goods; a general assortment, such as are usually kept in a country store.

Cross-int. 2. How many similar stores are there in Orange?

Ans. There is not any now.

Cross-int. 3. How long has Mr. Wheeler been a customer of yours?

Ans. About six years.

Cross-int. 4. Have you never heard any one in Orange or Dana, or the neighboring towns, say that Mr. Wheeler's word could not be depended upon, or anything to that effect?

Ans. No, sir; not that I can recall to mind now.

Cross-int. 5. Are you willing to make oath that you never did?

Ans. No, sir, I am not.

Cross-int. 6. Do you know that you have heard such remarks that you have forgotten?

Ans. No, sir; I do not know that I have.

Cross-int. 7. Have you ever heard any one in Orange or Dana, or the neighboring towns, say that Mr. Wheeler wasn't honest, or anything to that effect?

(Objected to.)

474 Ans. Not that I can recollect.

Cross-int. 8. Can you swear that you never have?

Ans. No, sir.

Cross-int. 9. Search your memory carefully, and state any remark you have ever heard or made yourself to any one else, derogatory at all to Mr. Wheeler's reputation, whether for truth, veracity, or honesty?

Ans. I don't know of ever hearing any one else make any, or of making any myself. I have no recollection of any.

Cross-int. 10. Have you been in a condition to hear such remarks, if any had been made in those places?

(Objected to.)

Ans. I never was in Dana in my life. Perhaps I shouldn't have heard them here unless they had been made in my store. I haven't been much in other towns round here.

Cross-int. 11. Is your memory of such things strong?

Ans. Perhaps not so strong as some people's memory is.

Cross-int. 12. What is your belief upon this point, that is, do you believe that you may have heard them and forgotten them, or do you believe that you never heard them at all.

(Objected to.)

Ans. I can't say. I shouldn't wish to state that I believed I had heard anything unless I could recollect something that was said about it.

Cross-int. 13. Your answer, if I understand it, amounts to saying you do not believe that you ever heard any such reports. If I am not correct in this understanding, please explain your meaning a little more fully?

(Objected to.)

Ans. I didn't say so; I said I had no recollection of hearing any such reports.

Cross-int. 14. Will you swear, sir, that you do not believe you ever heard any such reports? (Objected to.) The question is simply as to your present belief.

Ans. No, sir; I will not swear I do not believe I ever heard any such reports, because I have stated before that I did not wish to state that I had or had not heard any reports unless I could recollect something that was said.

Cross-int. 15. Will you, after careful consideration, swear that you have no recollection of having heard any such reports?

(Objected to.)

Ans. Yes, sir.

Cross-int. 16. Will you swear that you have no recollection
475 of the substance of any remark or remarks which you may have heard derogatory to Mr. Wheeler's reputation for truth or veracity?

Ans. Yes, sir.

Cross-int. 17. And also as to honesty?

(Objected to.)

Ans. Yes, sir.

Direct resumed:

Int. 1. Is your memory as good as that of people in general?

Ans. I don't know anything but what it is.

Cross resumed:

Cross-int. 1. Is your recollection of conversations as good as that of people in general?

Ans. I think it is.

THOMAS E. BRIDGE.

Deposition of Robert E. Carpenter.

Int. 1. What is your name, age, residence, and occupation?

Ans. Robert E. Carpenter; sixty-one years of age; residence in Orange; I am a mechanic.

Int. 2. How long have you resided in Orange?

Ans. Something over thirty-two years.

Int. 3. State whether you know Lyman Wheeler, of Orange; and if yes, how long you have known him, and how you happened to know him.

Ans. I have known him since he came here, five or six years ago, and bought a shop and water power of me. I have had dealings with him since, more or less every year.

Int. 4. State what the reputation of said Lyman Wheeler is in the community for truth and veracity.

Ans. Good, sir.

Cross-examined:

Cross-int. 1. Do you believe it to be as good as yours?

(Objected to.)

Ans. I don't know whether mine is good or not. I consider his good.

476 Cross-int. 2. Have you never heard any one in Dana or Orange, or the neighboring towns, say that Mr. Wheeler's word could not be depended upon, or anything to that effect?

Ans. I don't know that I have ever heard any one say that his word couldn't be depended upon. I don't recollect anything of the kind now.

Cross-int. 3. Are you willing to swear that you did not?

Ans. Yes. Not that I recollect of.

Cross-int. 4. Do you mean nothing at all, or nothing that you believed?

Ans. I mean nothing that I believed.

Cross-int. 5. How many times have you heard such remarks that you did not believe?

Ans. I don't recollect of any now.

Cross-int. 6. Do you know that you have heard such remarks?

Ans. I shouldn't be willing to swear that I had.

Cross-int. 7. Have you ever heard any one in Orange or Dana, or any of the neighboring towns, say that Mr. Wheeler wasn't honest, or words to that effect, whether you believed it or not?

(Objected to.)

Ans. I don't know as I could swear that I had.

Cross-int. 8. Can you swear that you did not.

Ans. I should not.

Cross-int. 9. Have you ever had any political connexions with Mr. Wheeler?

(Objected to.)

Ans. No, sir.

Cross-int. 10. Are you interested now in any business with Mr. Wheeler, directly or indirectly?

Ans. No, sir.

Cross-int. 11. Have you retired from business?

Ans. I am not in the same business that I was a year or two ago. I am not manufacturing as I was a year ago; but I have business enough now of different kinds.

Cross-int. 12. What business have you?

Ans. I have farms, houses, and land, a shop and water power on this river, and I take charge of these.

Cross-int. 13. Please search your memory carefully, and state any remark you have ever heard, or made yourself to any one else, derogatory at all to Mr. Wheeler's reputation, whether for truth or veracity, or honesty.

(Objected to.)

Ans. I know there was something said at the time of the fire
477 about Mr. Wheeler; but I don't recollect who said. I don't know as I could swear to the remarks that have been made.

Cross-int. 14. Give the substance of such remarks as well as you now recollect it.

(Objected to.)

Ans. At the time the shop was burnt some said it was well insured, and rather gave the idea—I don't know as they said it in words—that it was set on fire. It was talked by some, or rather intimated, that Mr. Wheeler set it on fire. I don't know that I think of anything more.

Cross-int. 15. How did you happen to hear these remarks?

(Objected to.)

Ans. I don't know how I happened to.

Cross-int. 16. Didn't they say it was like Wheeler, or one of Wheeler's tricks, or something of that general nature?

Ans. I don't recollect as they did. I had some talk with Mr. Sibley. He might have said something of the kind, but I couldn't swear that he did.

Cross-int. 17. Can you testify that you never heard any other remarks derogatory to Mr. Wheeler's reputation for truth, honesty, or veracity, excepting those about the fire?

Ans. I don't recollect any now.

Direct resumed:

Int. 1. Do you know whether or not the companies in which Mr. Wheeler was insured at the time you have spoken of, or any of said companies, made an examination into the circumstances of said fire?

(Objected to.)

Ans. I know that some of them did. They were here and talked with me at the time. I couldn't give their names.

Int. 2. Do you know whether or not said companies that did make such examination paid Mr. Wheeler his insurance?

(Objected to.)

Ans. I think I know that some of them paid, but I don't really want to swear which ones.

Cross resumed:

Cross-int. 1. Do you know the name of the lawyer who came to Fitchburg to investigate the facts of the case?

Ans. I don't recollect his name. I saw a number of agents here.

478 Cross-int. 2. Did you talk with them about the matter?

Ans. I did some.

Cross-int. 3. Did you ever hear one of them say, We know he did it, damn him; but we can't get proof of it, or words to that effect?

(Objected to.)

Ans. Nothing of the kind.

R. E. CARPENTER.

Deposition of Noah W. Packard.

JANUARY 31, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. Noah W. Packard; am fifty-four years old; residence, Orange. Have lived here some eighteen years or more. I am a mechanic and business man.

Int. 2. State whether you know Lyman Wheeler of Orange; and if yes, how long have you known him, and how you happened to know him.

Ans. I have known him some six or seven years. I knew him by having business with him, and he being in mechanical business, it led me to form an acquaintance with him.

Int. 3. State what the reputation of said Lyman Wheeler is in the community for truth and veracity.

Ans. So far as I know, very good.

Cross-examination:

Cross-int. 1. Have you never heard any one in Dana or Orange, or the neighboring towns, say that Mr. Wheeler's word could not be depended upon, or anything to that effect?

Ans. I think not.

Cross-int. Can you testify that you never did.

Ans. I do testify that I think I never did.

Cross-int. 3. Can you make that a little stronger, and leave out the word think?

Ans. I have no recollection of ever hearing any such remark.

Cross-int. 4. I suppose you mean that you never heard such remark at all, not that you can't recollect what was said.

479 Ans. I believe I never did.

Cross-int. 5. Have you ever heard a remark of any kind in those towns derogatory to Wheeler's character in any way?

(Objected to.)

Ans. I think not.

Cross-int. 6. Can you testify that you never have?

(Objected to.)

Ans. I have no recollection of any such remarks.

N. W. PACKARD.

Deposition of H. Woodward.

JANUARY 31, 1865.

Int. 1. What is your name, residence, and occupation?

Ans. My name is Hiram Woodward; am sixty-two years of age; reside in Orange, and have always done so; I am a lawyer, and hold the position of trial justice.

Int. 2. State whether you know Lyman Wheeler, of Orange; and if yes, how long you have known him and how you happened to know him.

Ans. I have known him some seven years. I happened to know him from the fact of his having purchased a mill and water privilege here and his calling at my office to have the writings made, and I have had business transactions with him more or less since that one, and have transacted business for him and others.

Int. 3. State whether or not your families are connected in any way by marriage or otherwise.

Ans. Some five years ago or more one of my sons married Mr. Wheeler's daughter, who died some four years ago.

Int. 4. State what the reputation of said Weeler is in the community for truth and veracity.

Ans. I consider it good, and I base it on two grounds: first, I infer from the fact of never having heard it called in question that it is good; second, from my having had business transactions with him and betwixt him and others, I have no reason to doubt his character for truth and veracity.

(Whole answer objected to.)

480 Cross-examination:

Cross-int. 1. What have been your personal relations with Mr. Wheeler for the last three or four years?

Ans. Similar to that of other men in business in the neighborhood and vicinity.

Cross-int. 2. Hasn't Mr. Wheeler been rather an intimate friend of yours?

Ans. No more so than Mr. Goddard or Mr. Cheney or other men in the village.

Cross-int. 3. You have heard all the other witnesses called by Mr. Wheeler examined, have you not?

Ans. I think I have heard them all.

Cross-int. 4. Where did the examination take place? In whose office?

Ans. At this place. My own office.

Cross-int. 5. You have never been admitted to the bar I believe.

Ans. I have not.

Cross-int. 6. Have you never heard any person in Dana or any of the neighboring towns say that Mr. Wheeler's word could not be depended upon, or anything to that effect?

Ans. I never have.

Cross-int. 7. Do you mean by that, that you can't recollect any

such remark made by any one, or are you willing to swear that you never have heard any such remark?

Ans. I mean to say that I don't recollect of ever hearing any such remarks, and if I had, think I should have recollected them.

Cross-int. 8. Do you mean don't recollect hearing them at all, or merely that you have forgotten the language used?

Ans. I mean that I do not recollect of ever hearing them at all.

Cross-int. 9. Have you ever heard any remark in those towns in any way derogatory to Mr. Wheeler's character?

(Objected to.)

Ans. I don't recollect any.

Cross-int. 10. Do you believe that you would recollect of them if you had heard them?

Ans. I think I should.

Cross-int. 11. Then, for all you ever heard, Mr. Wheeler's character for integrity, truth, honesty, and morality, is perfectly untarnished.

(Objected to.)

Ans. I never saw a perfect man, but I know of nothing against him, and I never heard anything against him.

HIRAM WOODWARD.

481 *Deposition of Damon E. Cheney.*

FEBRUARY 1, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. Damon E. Cheney; am thirty-six years of age; I reside in Orange, and have lived here about three years. I am a claim agent.

Int. 2. State whether you know Lyman Wheeler, of Orange; and if yes, how long have you known him, and how you happened to know him.

Ans. I have known him for five or six years, ever since he came to town; previously to my coming to Orange I lived in an adjoining town; I have known him as a townsman, and through business transactions.

Int. 3. State what the reputation of said Wheeler is in the community for truth and veracity.

Ans. I should say it was good.

Cross-examination:

Cross-int. 1. Have you ever heard any person in Dana or any of the neighboring towns say that Mr. Wheeler's say word could not be relied upon, or words to that effect?

Ans. I don't think I ever did.

Cross-int. 2. Can you testify that you never did?

Ans. I think so.

Cross-int. 3. Can you answer the last question "yes," and leave out the words "I think?"

Ans. I would be willing to.

Cross-int. 4. Are you willing to?

Ans. Yes, sir.

Cross-int. 5. Have you ever heard any remarks made by any one in those towns derogatory in any way to Mr. Wheeler's character? (Objected to.)

Ans. I don't think I have.

Cross-int. 6. Can you testify that you never have?

Ans. I think so.

Cross-int. 7. Can you answer that question "yes," leaving out the words "I think?"

Ans. Yes.

Cross-int. 7. What kind of claims do you solicit?

Ans. Against the United States and State governments?

482 Cross-int. 8. How long have you made that your business?

Ans. More or less for ten or twelve years.

Cross-int. 9. Do you ever buy claims against the government? (Objected to.)

Ans. I do.

Cross-int. 10. Is your recollection as good as that of ordinary men?

Ans. Perhaps so.

Cross-int. 11. Where did you live before you came to Orange?

Ans. In Warwick, about two miles from here.

Cross-int. 12. Is that town contiguous to Orange?

Ans. It is, on the north.

Cross-int. 13. Is that town included in your answer to the first cross-interrogatory?

Ans. I believe not.

Cross-int. 14. Have you ever heard any such remark in that town?

Ans. I never have.

DAMON E. CHENEY.

Deposition of Enoch Washburn.

JANUARY 31ST, 1865.

Int. 1. What is your name, age, residence, and occupation?

Ans. Enoch Washburn; am forty-nine years old; residence in Orange, and have lived here about twenty years; I am a mechanic.

Int. 2. State whether you know Lyman Wheeler, of Orange; and if yes, how long you have known him, and how you happened to know him.

Ans. I have known him since he came to town; I know him by seeing him occasionally, and having business with him.

Int. 3. State what the reputation of said Wheeler is in the community for truth and veracity.

Ans. I can only state as far as my own knowledge and observation is concerned; as far as I know it is good.

Cross-examination:

Cross-int. 1. Have you ever heard any person in Dana, Orange, or the neighboring towns say that Mr. Wheeler's word could not be depended upon, or anything to that effect?

Ans. I have no recollection that I ever did.

483 Cross-int. 2. Can you testify that you never did?

Ans. I think I never did.

Cross-int. 3. Do you recollect the substance of any such remark? I don't inquire for the words, but merely the idea expressed or hinted at.

Ans. I don't recollect of hearing any such remarks.

Cross-int. 4. Do you mean that you don't recollect of ever hearing any at all, or only that you have no recollection of ever hearing any that you believed?

Ans. I don't recollect of hearing any at all.

Cross-int. 5. Have you ever heard Mr. Wheeler talked about at all in any way?

Ans. Yes, sir.

Cross-int. 3. As to his character?

Ans. No, sir.

ENOCH WASHBURN.

Deposition of Davis Goddard.

FEBRUARY 1, 1865.

Int. What is your name, age, residence, and occupation?

Ans. Davis Goddard; am fifty-seven years of age; I reside in Orange, and have lived here some thirty years; I am the postmaster, and am one of the county commissioners of Franklin county; have been in trade until within a few years.

Int. 2. State whether you know Lyman Wheeler, of Orange; and if yes, how long you have known him, and how you happened to know him.

Ans. I do know him; he has resided in the village, and I had business with him at the store while I was in trade since eighteen hundred and fifty-seven, and have had business relations with him since.

Int. 3. State what the reputation of said Wheeler is in the community for truth and veracity.

Ans. I have no recollection of ever hearing his character questioned as to that, and from my business relations I think I should have recollected, as I was pecuniarily interested.

Cross-examination:

Cross-int. 1. What kind of a store was it that you spoke of in your direct examination?

Ans. A general variety store.

484 Cross-int. 2. You have testified that you don't recollect ever to have heard Wheeler's character questioned as to truth and veracity; can you testify that you never have?

Ans. I can testify that I believe I never have.

Cross-int. 3. Have you ever heard any remarks derogatory in any way to Mr. Wheeler's character?

Ans. No more than would attach to us all.

Cross-int. 4. Have you ever heard such remarks—I mean of the kind that would attach to us all—as to his truth and veracity?

Ans. I never have; I have no recollection of any.

Cross-int. 5. Do you know Deacon Hunt and John C. Hill, of Athol?

Ans. I know them both.

Cross-int. 6. Did you ever talk with either of these gentlemen or any of your neighbors as to whether Mr. Wheeler's word could be relied upon, or anything to that effect?

Ans. I have no recollection as to the subject being ever introduced as to his character for truth and veracity, or whether his word could be relied upon or not.

Cross-int. 7. Do you believe it to be probable that you might casually have heard such reports about the town without noticing them much, and might finally have forgotten them?

Ans. I don't know but that it is possible that I might have heard such a thing and not noticed it, but if I had heard it so as to notice it, I think I should have recollected it.

Cross-int. 8. What is Mr. Wheeler's business in this town?

Ans. When he commenced he was in company with a man by the name of Doane and one named Sibley in manufacturing piano legs and cases; after he was burnt out he erected a shop and put in machinery for the manufacture of iron machinery, but didn't do much business; he sold out before he got much machinery in; he has been in no particular business since he sold out that I am aware of.

Cross-int. 9. About what time was it that he sold out?

Ans. I think he sold his shop in October of 1863.

Cross-int. 10. When was he burnt out?

Ans. I could not say precisely; something like three years ago.

DAVIS GODDARD.

485 UNITED STATES OF AMERICA, *Massachusetts district, ss:*

I, John G. Stetson, clerk pro tem. of the circuit court of the United States for the first circuit, Massachusetts district, do hereby certify that the foregoing pages, three (3) to four hundred and eighty-four (484) inclusive, are a true and full copy of the record and of all proceedings in the cause of Warren Hale *et al.*, complainants in equity, *versus* Charles N. Stimpson *et al.*, defendants, including all the evidence used at the hearing of said cause.

In testimony whereof, I have hereunto subscribed my name and affixed the seal of said court, at Boston, in said district, this twenty-third day of October, in the year of our Lord one thousand eight hundred and sixty-five, and in the independence of the United States the ninetieth.

JOHN G. STETSON, *Clerk pro tem.*

486 *Bond.*

Know all men by these presents that we, Warren Hale, Allen Goodman, Lorenzo Hale, and John W. Goodman, all of North Dana, in

the Commonwealth of Massachusetts, as principals, and George T. Johnson and J. G. Hill, of Athol, both in said Commonwealth, as sureties, are holden and stand firmly bound and obliged unto Charles N. Stimpson, Warren Stimpson, and Horace C. Stimpson, all of Westfield, in said Commonwealth, in the full and just sum of five hundred dollars to be paid unto the said Charles N., Warren, and Horace C. , executors, administrators, or assigns, to which payment well and truly to be made we bind ourselves, our heirs, executors, and administrators firmly by these presents. Sealed with our seals, dated the twenty-third day of October, in the year of our Lord one thousand eight hundred and sixty-five.

The condition of this obligation is such that, whereas the said Warren Hale, Allen Goodman, Lorenzo Hale, and John W. Goodman have claimed an appeal to the Supreme Court of the United States to remove the judgment rendered in the suit of Warren Hale *et al.*, in equity, *vs.* Charles N. Stimpson *et al.* by the circuit court of the United States for the first circuit for the district of Massachusetts:

Now if the said Warren Hale, Allen Goodman, Lorenzo Hale, and John W. Goodman shall prosecute their said appeal to effect, and answer all damages and costs if they shall fail to make good their appeal, then this obligation shall be void; otherwise it shall remain in full force and virtue.

WARREN HALE. [SEAL.]
ALLEN GOODMAN. [SEAL.]
LORENZO HALE. [SEAL.]
J. W. GOODMAN. [SEAL.]
GEO. T. JOHNSON. [SEAL.]
J. C. HILL. [SEAL.]

In presence of us—
J. F. PECKHAM.
CHAS. C. BASSETT.
A. HARDING, Jr.

[Int. rev. stamp, 50 cents, cancelled.]

Approved:

NATHAN CLIFFORD,
Associate Justice Sup. Court U. S.

U. S. C. C., Mass. dist.

OCT. 23D, 1865.

A true copy of bond and approval thereof on file in the clerk's office of the circuit court of the U. S., Mass. dist.

Attest:

JOHN. G. STETSON, *Clerk pro tem.*

Record filed in Supreme Court December 4, 1865.